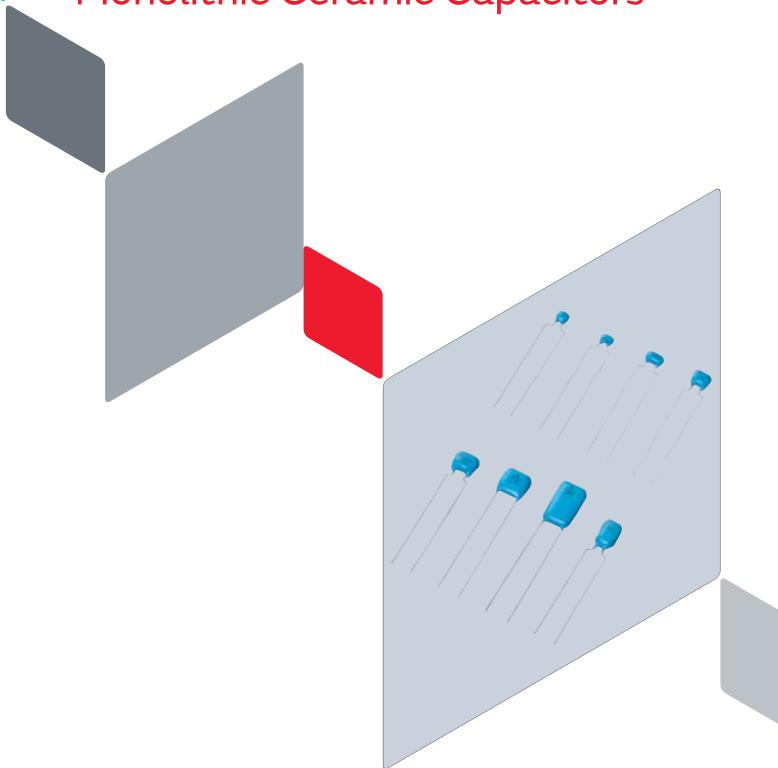


# Radial Lead Type Monolithic Ceramic Capacitors





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Product specifications are as of September 2016.

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Please check the MURATA website (http://www.murata.com/) if you cannot find a part number in this catalog.

#### Part Numbering

## Radial Lead Type Monolithic Ceramic Capacitors

(Part Number) RC E R7 1H 104 K 0 M1 H03 A

#### ①Product ID

#### 2Series/Terminal

Product ID	Series/Terminal	
RC	E	Radial Lead Type Monolithic Ceramic Capacitors 125°C max. (for Automotive) (DC25V-DC1kV)
RH	E	Radial Lead Type Monolithic Ceramic Capacitors 150°C max. (for Automotive) (DC25V-DC100V)
RD	E	Radial Lead Type Monolithic Ceramic Capacitors (Only for General Use) (DC25V-DC1kV)

#### **3**Temperature Characteristics

Code	Temperature Characteristics	Reference Temperature	Temperature Range	Capacitance Change or Temperature Coefficient	Operating Temperature Range
5C	COG	25°C	25 to 125°C	0±30ppm/°C	-55 to 125°C
50	5C COG		-55 to 25°C	0+30/-72ppm/°C	-55 (0 125 °C
50	<b>5G</b> X8G 25°C		25 to 150°C	0±30ppm/°C	-55 to 150°C
5G			-55 to 25°C	0+30/-72ppm/°C	-55 (0 150-C
7U	U2J	25°C	25 to 125°C	-750±120ppm/°C	-55 to 125°C
70	023	25-0	-55 to 25°C	-750+120/-347ppm/°C	-55 (0 125 °C
C7	X7S	25°C	-55 to 125°C	±22%	-55 to 125°C
D7	X7T	25°C	-55 to 125°C	+22, -33%	-55 to 125°C
L8	X8L	25°C	-55 to 125°C	±15%	FF to 15000
L8	\ \ASL	25°C	125 to 150°C	+15, -40%	-55 to 150°C
R7	X7R	25°C	-55 to 125°C	±15%	-55 to 125°C

#### 4Rated Voltage

Code	Rated Voltage
1E	DC25V
1H	DC50V
2A	DC100V
2E	DC250V
2W	DC450V
2H	DC500V
2J	DC630V
3A	DC1kV
	·

#### **5**Capacitance

Expressed by three figures. The unit is pico-farad (pF). The first and second figures are significant digits, and the third figure expresses the number of zeros that follow the two numbers. If there is a decimal point, it is expressed by the capital letter "R." In this case, all figures are significant digits.

#### **6**Capacitance Tolerance

Code	Capacitance Tolerance	Temperature Characteristics	Capacitance Step		
С	±0.25pF		≦5pF: 1pF Step		
D	±0.5pF	C0G/X8G	6 to 9pF: 1pF Step		
J	±5%		≧10: E12 Series		
К	±10%	X7S/X7T/ X7R/X8L	E6 Series		
М	±20%	X7S/X7T/ X7R/X8L	E3 Series		

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## **7**Dimensions (LxW)

Code	Dimensions (LxW)
0	3.6×3.5mm or 4.0×3.5mm or 5.0×3.5mm (Depends on Part Number)
1	4.0×3.5mm or 4.5×3.5mm or 5.0×3.5mm (Depends on Part Number)
2	5.5×4.0mm
3	5.5×5.0mm
4	7.5×5.5mm
5	7.5×7.5mm or 7.5×8.0mm (Depends on Part Number)
U	7.7×12.5mm or 7.7×13.0mm (Depends on Part Number)
W	5.5×7.5mm

#### **8**Lead Style

Code	Lead Style	Lead Spacing
A2	Straight Long	2.5mm
B1	Straight Long	5.0mm
DB	Straight Taping	2.5mm
E1	Straight Taping	5.0mm
K1	Inside Crimp	5.0mm
M1	Inside Crimp Taping	5.0mm
P1	Outside Crimp	2.5mm
S1	Outside Crimp Taping	2.5mm

Lead distance between reference and bottom planes.

M1, S1, DB :  $H_0 = 16.0 \pm 0.5 mm$ 

E1 : H = 17.5±0.5mm

## Individual Specification Code Expressed by three figures

#### Packaging

Code	Packaging
Α	Ammo Pack
В	Bulk

# Radial Lead Type Monolithic Ceramic Capacitors

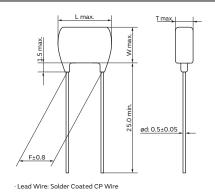
#### **Features**

- 1. Small size and large capacitance
- 2. Low ESR and ESL suitable for high frequency
- 3. Meet AEC-Q200, ISO7637-2 (surge test) requirement
- 4. Meet LF (Lead Free) and HF (Halogen Free)
- 5. Flow soldering and welding are available. (Re-flow soldering is not available.)
- 6. If copper wire is necessary at welding process, copper wire is available based on request.



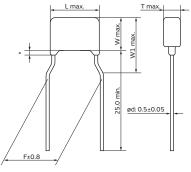
Dimensions code: 1

Lead style code: A2

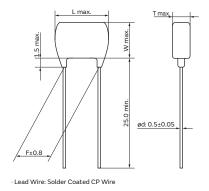


(in mm)



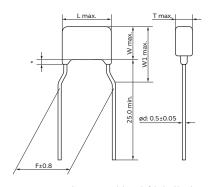


- Coating extension does not exceed the end of the lead bend. Lead Wire: Solder Coated CP Wire

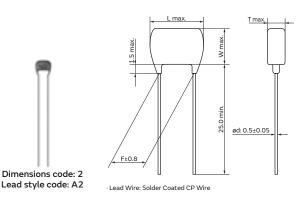


(in mm)



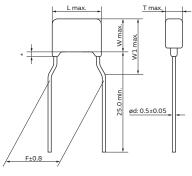


Coating extension does not exceed the end of the lead bend. Lead Wire: Solder Coated CP Wire



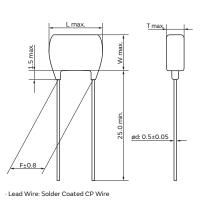
(in mm)





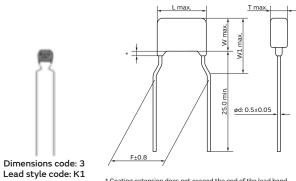
- Coating extension does not exceed the end of the lead bend.
- Lead Wire: Solder Coated CP Wire (in mm)

Dimensions code: 3 Lead style code: A2

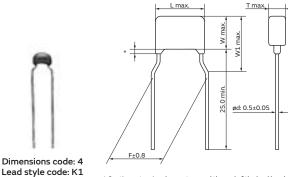


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(in mm)

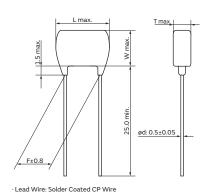


\* Coating extension does not exceed the end of the lead bend.  $\cdot$  Lead Wire: Solder Coated CP Wire

(in mm)



Dimensions code: 5 Lead style code: B1

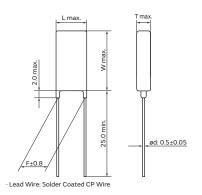


(in mm)



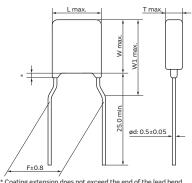
Dimensions code: U Lead style code: B1

**Dimensions** 



(in mm)





Coating extension does not exceed the end of the lead bend.
Lead Wire: Solder Coated CP Wire

Dimensions and	Dimensions (mm)								
Lead Style Code	L	W	W1	Т	F	d			
0A2/0DB	3.6	3.5	-		2.5	0.5			
0K1/0M1	3.6	3.5	6.0		5.0	0.5			
1A2/1DB	4.0	3.5	-		2.5	0.5			
1K1/1M1	4.0	3.5	5.0		5.0	0.5			
2A2/2DB	5.5	4.0	-		2.5	0.5			
2K1/2M1	5.5	4.0	6.0	See the individual	5.0	0.5			
3A2/3DB	5.5	5.0	-	product specification	2.5	0.5			
3K1/3M1	5.5	5.0	7.5		5.0	0.5			
4K1/4M1	7.5	5.5	8.0		5.0	0.5			
5B1/5E1	7.5	7.5*	-		5.0	0.5			
UB1/UE1	7.7	12.5*	-		5.0	0.5			
WK1/WM1	5.5	7.5	10.0		5.0	0.5			

\*DC630V, DC1kV: W+0.5mm

## Marking

Marking												
Rated Voltage	DC25V		DC50V			DC100V		DC250V	DC630V	DC1kV		
Dimensions Char.	X7R	COG	X7S	X7R	COG	X7S	X7R	>	(7R, U2J, C0	G		
o			-			-		-	-	-		
1	224K	A 102J	[105K]	224K	A 102J	-	224K	U 102J (U2J)	-	-		
								(U2J)	(U2J)	102 JAU (U2J)		
2	(H <sub>K2C</sub> )	563 J5A	(MK5C)	(MK5C)	(M) J1A	-	105 K1C	(X7R)	(X7R)	(X7R)		
								(COG)	(C0G)	(COG)		
3, 4, W	© 226 K2C	-	(M106) K5C	(M335) K5C	-	(M225) K1C	-	(W224 K4C (X7R)	(M103 J7U (U2J) (M104 K7C (X7R)	(U2J) (M333) (M2F) (X7R)		
5, U	-	-	-	-	-	-	-	- (X7R) - (M) 474 K4C)	(X7R) (M) 3333 J7U (U2J) (U2J) (M) 474 M7C	(X/R)  103 JAU  (U2J)  (U2J)  (N4 KAC		
Temperature Characteristics		Marked with code (COG char.: A, X7S/X7R char.: C, U2J char.: U) A part is omitted (Please refer to the marking example.)										
Nominal Capacitance	Under 100	pF: Actual v	alue 100pF	and over: Ma	arked with 3	figures						
Capacitance Tolerance	Marked w	Under 100pF: Actual value 100pF and over: Marked with 3 figures  Marked with code A part is omitted (Please refer to the marking example.)										
Rated Voltage	I .	•	25V: 2, DC50 se refer to th			V: 4, DC630V	': 7, DC1kV: A	A)				
Manufacturer's Identification	Marked w A part is o		se refer to th	e marking ex	ample.)							

## **■** Temperature Compensating Type, COG/U2J Characteristics

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE5C1H1R0C0□□H03□	COG (EIA)	50Vdc	1.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H1R0C0 H03	COG (EIA)	50Vdc	1.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H2R0C0 H03	COG (EIA)	50Vdc	2.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H2R0C0 H03	COG (EIA)	50Vdc	2.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H3R0C0 H03	COG (EIA)	50Vdc	3.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H3R0C0 H03	COG (EIA)	50Vdc	3.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H4R0C0 H03	COG (EIA)	50Vdc	4.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H4R0C0 H03	COG (EIA)	50Vdc	4.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H5R0C0 H03	COG (EIA)	50Vdc	5.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H5R0C0□□H03□	COG (EIA)	50Vdc	5.0pF±5%	3.6×3.5	2.5	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE5C1H6R0D0□□H03□	COG (EIA)	50Vdc	6.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H6R0D0□□H03□	COG (EIA)	50Vdc	6.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H7R0D0□□H03□	COG (EIA)	50Vdc	7.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H7R0D0□□H03□	COG (EIA)	50Vdc	7.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H8R0D0□□H03□	COG (EIA)	50Vdc	8.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H8R0D0 H03	COG (EIA)	50Vdc	8.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H9R0D0 H03	COG (EIA)	50Vdc	9.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H9R0D0 H03	COG (EIA)	50Vdc	9.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H100J0 H03	COG (EIA)	50Vdc	10pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H100J0 H03	COG (EIA)	50Vdc	10pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H120J0 H03	COG (EIA)	50Vdc	12pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H120J0 H03	COG (EIA)	50Vdc	12pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H150J0 H03	COG (EIA)	50Vdc	15pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H150J0 H03	COG (EIA)	50Vdc	15pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H180J0□□H03□	COG (EIA)	50Vdc	18pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H180J0 H03	COG (EIA)	50Vdc	18pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H220J0 H03	COG (EIA)	50Vdc	22pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H220J0 H03	COG (EIA)	50Vdc	22pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H270J0 H03	COG (EIA)	50Vdc	27pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H270J0 H03	COG (EIA)	50Vdc	27pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H330J0 H03	COG (EIA)	50Vdc	33pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H330J0 H03	COG (EIA)	50Vdc	33pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H390J0□□H03□	COG (EIA)	50Vdc	39pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H390J0□□H03□	COG (EIA)	50Vdc	39pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H470J0 H03	COG (EIA)	50Vdc	47pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H470J0 H03	COG (EIA)	50Vdc	47pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H560J0 H03	COG (EIA)	50Vdc	56pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H560J0□□H03□	COG (EIA)	50Vdc	56pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H680J0 H03	COG (EIA)	50Vdc	68pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H680J0□□H03□	COG (EIA)	50Vdc	68pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H820J0□□H03□	COG (EIA)	50Vdc	82pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H820J0□□H03□	COG (EIA)	50Vdc	82pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H101J0 H03	COG (EIA)	50Vdc	100pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H101J0 H03	COG (EIA)	50Vdc	100pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H121J0 H03	COG (EIA)	50Vdc	120pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H121J0 H03	COG (EIA)	50Vdc	120pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H151J0 H03	COG (EIA)	50Vdc	150pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H151J0 H03	COG (EIA)	50Vdc	150pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H181J0 H03	COG (EIA)	50Vdc	180pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H181J0 H03	COG (EIA)	50Vdc	180pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H221J0 H03	COG (EIA)	50Vdc	220pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H221J0 H03	COG (EIA)	50Vdc	220pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H271J0 H03	COG (EIA)	50Vdc	270pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H271J0 H03	COG (EIA)	50Vdc	270pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H331J0 H03	COG (EIA)	50Vdc	330pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H331J0 H03	COG (EIA)	50Vdc	330pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H391J0 H03	COG (EIA)	50Vdc	390pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H391J0 H03	COG (EIA)	50Vdc	390pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H471J0 H03	COG (EIA)	50Vdc	470pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H471J0 H03	COG (EIA)	50Vdc	470pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H561J0 H03	COG (EIA)	50Vdc	560pF±5%	3.6×3.5	2.5	2.5	A2	DB M1
RCE5C1H561J0 H03	COG (EIA)	50Vdc	560pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H681J0 H03	COG (EIA)	50Vdc	680pF±5%	3.6×3.5	2.5	2.5	A2	DB M1
RCE5C1H681J0 H03	COG (EIA)	50Vdc	680pF±5%	3.6×3.5	2.5	5.0	K1	M1 DB
RCE5C1H821J0 H03	COG (EIA)	50Vdc 50Vdc	820pF±5%	3.6×3.5	2.5	2.5 5.0	A2	M1
RCE5C1H821J0 H03	COG (EIA)		820pF±5%	3.6×3.5			K1	
RCE5C1H102J0□□H03□	COG (EIA)	50Vdc	1000pF±5%	3.6×3.5	2.5	2.5	A2	DB

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Part Number	Temp. Char.	Rated Voltage	Capacitance	LxW	T	F <sup>'</sup>	Code	Code
D05501110210□□102□			1000-5:5%	(mm)	(mm)	(mm)	Bulk	Taping
RCE5C1H102J0 H03	COG (EIA)	50Vdc	1000pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H122J0 H03	COG (EIA)	50Vdc	1200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H122J0 H03	COG (EIA)	50Vdc	1200pF±5%	3.6×3.5		5.0	K1	M1
RCE5C1H152J0 H03	COG (EIA)	50Vdc	1500pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H152J0 H03	COG (EIA)	50Vdc	1500pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H182J0 H03	COG (EIA)	50Vdc	1800pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H182J0 H03	COG (EIA)	50Vdc	1800pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H222J0 H03	COG (EIA)	50Vdc	2200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H222J0 H03	COG (EIA)	50Vdc	2200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H272J0 H03	COG (EIA)	50Vdc	2700pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H272J0 H03	COG (EIA)	50Vdc	2700pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H332J0 H03	COG (EIA)	50Vdc	3300pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H332J0 H03	COG (EIA)	50Vdc	3300pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H392J0 H03	COG (EIA)	50Vdc	3900pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H392J0 H03	COG (EIA)	50Vdc	3900pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H472J1 H03	COG (EIA)	50Vdc	4700pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H472J1 H03	COG (EIA)	50Vdc	4700pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H562J1 H03	COG (EIA)	50Vdc	5600pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H562J1 H03	COG (EIA)	50Vdc	5600pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H682J1 H03	COG (EIA)	50Vdc	6800pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H682J1 H03	COG (EIA)	50Vdc	6800pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H822J1 H03	COG (EIA)	50Vdc	8200pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H822J1 H03	COG (EIA)	50Vdc	8200pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H103J1 H03	COG (EIA)	50Vdc	10000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H103J1 H03	COG (EIA)	50Vdc	10000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H123J1 H03	COG (EIA)	50Vdc	12000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H123J1 H03	COG (EIA)	50Vdc	12000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H153J1 H03	COG (EIA)	50Vdc	15000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H153J1 H03 RCE5C1H183J1 H03	COG (EIA)	50Vdc	15000pF±5% 18000pF±5%	4.0×3.5	2.5	5.0	K1	M1
	COG (EIA)	50Vdc 50Vdc	'	4.0×3.5 4.0×3.5	2.5	2.5	A2	DB M1
RCE5C1H183J1	COG (EIA)	50Vdc	18000pF±5% 22000pF±5%	4.0×3.5 4.0×3.5	2.5	5.0 2.5	K1 A2	DB
RCE5C1H223J1	COG (EIA)	50Vdc	22000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H273J2 H03	COG (EIA)	50Vdc	27000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H273J2 H03	COG (EIA)	50Vdc	27000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C1H333J2 H03	COG (EIA)	50Vdc	33000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H333J2 H03	COG (EIA)	50Vdc	33000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C1H393J2 H03	COG (EIA)	50Vdc	39000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H393J2 H03	COG (EIA)	50Vdc	39000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C1H473J2 H03	COG (EIA)	50Vdc	47000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H473J2 H03	COG (EIA)	50Vdc	47000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C1H563J2 H03	COG (EIA)	50Vdc	56000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H563J2 H03	COG (EIA)	50Vdc	56000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2A1R0C0 H03	, ,	100Vdc	1.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A1R0C0 H03	, ,	100Vdc	1.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A2R0C0 H03	, ,	100Vdc	2.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A2R0C0 H03	, ,	100Vdc	2.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A3R0C0□□H03□	, ,	100Vdc	3.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A3R0C0□□H03□	, ,	100Vdc	3.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A4R0C0□□H03□	, ,	100Vdc	4.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A4R0C0□□H03□	, ,	100Vdc	4.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A5R0C0□□H03□	, ,	100Vdc	5.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A5R0C0□□H03□	, ,	100Vdc	5.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A6R0D0□□H03□	, ,	100Vdc	6.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A6R0D0□□H03□	COG (EIA)	100Vdc	6.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A7R0D0□□H03□	COG (EIA)	100Vdc	7.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A7R0D0□□H03□	COG (EIA)	100Vdc	7.0pF±5%	3.6×3.5	2.5	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE5C2A8R0D0□□H03□	COG (EIA)	100Vdc	8.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A8R0D0□□H03□	COG (EIA)	100Vdc	8.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A9R0D0□□H03□	COG (EIA)	100Vdc	9.0pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A9R0D0□□H03□	COG (EIA)	100Vdc	9.0pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A100J0 H03	COG (EIA)	100Vdc	10pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A100J0 H03	COG (EIA)	100Vdc	10pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A120J0 H03	COG (EIA)	100Vdc	12pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A120J0 H03	COG (EIA)	100Vdc	12pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A150J0 H03	COG (EIA)	100Vdc	15pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A150J0 H03	COG (EIA)	100Vdc	15pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A180J0□□H03□	COG (EIA)	100Vdc	18pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A180J0 H03	COG (EIA)	100Vdc	18pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A220J0 H03	COG (EIA)	100Vdc	22pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A220J0□□H03□	COG (EIA)	100Vdc	22pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A270J0 H03	COG (EIA)	100Vdc	27pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A270J0 H03	COG (EIA)	100Vdc	27pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A330J0 H03	COG (EIA)	100Vdc	33pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A330J0 H03	COG (EIA)	100Vdc	33pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A390J0 H03	COG (EIA)	100Vdc	39pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A390J0 H03	COG (EIA)	100Vdc	39pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A470J0 H03	COG (EIA)	100Vdc	47pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A470J0 H03	COG (EIA)	100Vdc	47pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A560J0 H03	COG (EIA)	100Vdc	56pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A560J0 H03	COG (EIA)	100Vdc	56pF±5%	3.6×3.5	2.5	5.0	K1	M1 DB
RCE5C2A680J0 H03 RCE5C2A680J0 H03	COG (EIA)	100Vdc 100Vdc	68pF±5% 68pF±5%	3.6×3.5 3.6×3.5	2.5	2.5 5.0	A2 K1	M1
RCE5C2A820J0 H03	COG (EIA)	100Vdc	82pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A820J0 H03	COG (EIA)	100Vdc	82pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A101J0 H03	COG (EIA)	100Vdc	100pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A101J0 H03	COG (EIA)	100Vdc	100pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A121J0 H03	COG (EIA)	100Vdc	120pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A121J0 H03	COG (EIA)	100Vdc	120pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A151J0 H03	COG (EIA)	100Vdc	150pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A151J0 H03	COG (EIA)	100Vdc	150pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A181J0 H03	COG (EIA)	100Vdc	180pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A181J0 H03	COG (EIA)	100Vdc	180pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A221J0 H03	COG (EIA)	100Vdc	220pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A221J0□□H03□	COG (EIA)	100Vdc	220pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A271J0□□H03□	COG (EIA)	100Vdc	270pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A271J0 H03	COG (EIA)	100Vdc	270pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A331J0 H03	COG (EIA)	100Vdc	330pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A331J0 H03	COG (EIA)	100Vdc	330pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A391J0 H03	COG (EIA)	100Vdc	390pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A391J0 H03	COG (EIA)	100Vdc	390pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A471J0 H03	COG (EIA)	100Vdc	470pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A471J0 H03	COG (EIA)	100Vdc	470pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A561J0 H03	COG (EIA)	100Vdc	560pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A561J0 H03	COG (EIA)	100Vdc 100Vdc	560pF±5%	3.6×3.5	2.5	5.0 2.5	K1	M1 DB
RCE5C2A681J0 H03 RCE5C2A681J0 H03	COG (EIA)	100Vdc	680pF±5% 680pF±5%	3.6×3.5 3.6×3.5	2.5	5.0	A2 K1	DB M1
RCE5C2A881J0 H03	COG (EIA)	100Vdc	820pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A821J0 H03	COG (EIA)	100Vdc	820pF±5% 820pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A102J0 H03	COG (EIA)	100Vdc	1000pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A102J0 H03	COG (EIA)	100Vdc	1000pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A122J0 H03	COG (EIA)	100Vdc	1200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A122J0 H03	COG (EIA)	100Vdc	1200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A152J0 H03	COG (EIA)	100Vdc	1500pF±5%	3.6×3.5	2.5	2.5	A2	DB
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Continued from the preceding pa				Dimensions	Dimension	Lead Space	Lead Style	Lead Style
Part Number	Temp. Char.	Rated Voltage	Capacitance	LxW	T	F <sup>'</sup>	Code	Code
DOEE0341E310□□H03□			1500p5+59/	(mm)	(mm) 2.5	(mm)	Bulk	Taping M1
RCE5C2A152J0 H03 RCE5C2A182J1 H03	COG (EIA)	100Vdc 100Vdc	1500pF±5% 1800pF±5%	3.6×3.5 4.0×3.5	2.5	5.0 2.5	K1 A2	DB
RCE5C2A182J1 H03	COG (EIA)	100Vdc	1800pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C2A222J1 H03	COG (EIA)	100Vdc	2200pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C2A222J1 H03	COG (EIA)	100Vdc	2200pF±5% 2200pF±5%	4.0×3.5	2.5	5.0	K1	M1
	COG (EIA)	100Vdc	2700pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C2A272J1 H03 RCE5C2A272J1 H03	` ′	100Vdc	'	4.0×3.5 4.0×3.5	2.5	5.0	K1	M1
	COG (EIA)		2700pF±5%					
RCE5C2A332J1 H03	COG (EIA)	100Vdc	3300pF±5%	4.0×3.5	2.5	2.5	A2	DB M1
RCE5C2A332J1 H03	COG (EIA)	100Vdc	3300pF±5%	4.0×3.5		5.0 2.5	K1 A2	M1 DB
RCE5C2A392J2 H03	COG (EIA)	100Vdc	3900pF±5%	5.5×4.0	3.15			
RCE5C2A392J2 H03	COG (EIA)	100Vdc	3900pF±5%	5.5×4.0	3.15	5.0	K1 A2	M1
RCE5C2A472J2 H03	COG (EIA)	100Vdc	4700pF±5%	5.5×4.0	3.15	2.5		DB M1
RCE5C2A472J2 H03	COG (EIA)	100Vdc	4700pF±5%	5.5×4.0 5.5×4.0	3.15	5.0	K1	M1
RCE5C2A562J2 H03	COG (EIA)	100Vdc	5600pF±5%		3.15	2.5	A2	DB
RCE5C2A562J2 H03	COG (EIA)	100Vdc	5600pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2A682J2 H03	COG (EIA)	100Vdc	6800pF±5%	5.5×4.0	3.15	2.5	A2	DB M1
RCE5C2A682J2 H03	COG (EIA)	100Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2A822J2 H03	COG (EIA)	100Vdc	8200pF±5%	5.5×4.0	3.15	2.5	A2	DB M1
RCE5C2A822J2 H03	COG (EIA)	100Vdc 100Vdc	8200pF±5% 10000pF±5%	5.5×4.0 5.5×4.0	3.15	5.0 2.5	K1 A2	M1 DB
RCE5C2A103J2	COG (EIA)	100Vdc	10000pF±5% 10000pF±5%	5.5×4.0 5.5×4.0	3.15 3.15	5.0	K1	M1
RCE5C2E100J2 H03	COG (EIA)	250Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E120J2 H03	COG (EIA)	250Vdc	10pF±5 % 12pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E150J2 H03	COG (EIA)	250Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E180J2 H03	COG (EIA)	250Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E220J2 H03	COG (EIA)	250Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E270J2 H03	COG (EIA)	250Vdc	27pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E330J2 H03	COG (EIA)	250Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E390J2 H03	COG (EIA)	250Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E470J2 H03	COG (EIA)	250Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E560J2 H03	COG (EIA)	250Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E680J2□□H03□	COG (EIA)	250Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E820J2 H03	COG (EIA)	250Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E101J2 H03	COG (EIA)	250Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E121J2 H03	COG (EIA)	250Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E151J2 H03	COG (EIA)	250Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E181J2 H03	COG (EIA)	250Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E221J2 H03	COG (EIA)	250Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E271J2 H03	COG (EIA)	250Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E331J2 H03	COG (EIA)	250Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E391J2□□H03□	COG (EIA)	250Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E471J2 H03	COG (EIA)	250Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E561J2 H03	COG (EIA)	250Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E681J2□□H03□	COG (EIA)	250Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E821J2□□H03□	COG (EIA)	250Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E102J2□□H03□	COG (EIA)	250Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E122J2□□H03□	COG (EIA)	250Vdc	1200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E152J2 H03	COG (EIA)	250Vdc	1500pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E182J2 H03	COG (EIA)	250Vdc	1800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E222J2 H03	COG (EIA)	250Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E272J2 H03	COG (EIA)	250Vdc	2700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E332J2 H03	COG (EIA)	250Vdc	3300pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E392J2□□H03□	COG (EIA)	250Vdc	3900pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E472J2 H03	COG (EIA)	250Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E562J2 H03	COG (EIA)	250Vdc	5600pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E682J2 H03	COG (EIA)	250Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E822J2□□H03□	COG (EIA)	250Vdc	8200pF±5%	5.5×4.0	3.15	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE5C2E103J2 H03	COG (EIA)	250Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E123J2 H03	COG (EIA)	250Vdc	12000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E153J2 H03	COG (EIA)	250Vdc	15000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J100J2 H03	COG (EIA)	630Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J120J2 H03	COG (EIA)	630Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J150J2 H03	COG (EIA)	630Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J180J2 H03	COG (EIA)	630Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J220J2 H03	COG (EIA)	630Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J270J2□□H03□	COG (EIA)	630Vdc	27pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J330J2 H03	COG (EIA)	630Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J390J2 H03	COG (EIA)	630Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J470J2 H03	COG (EIA)	630Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J560J2 H03	COG (EIA)	630Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J680J2□□H03□	COG (EIA)	630Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J820J2 H03	COG (EIA)	630Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J101J2 H03	COG (EIA)	630Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J121J2 H03	COG (EIA)	630Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J151J2 H03	COG (EIA)	630Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J181J2 H03	COG (EIA)	630Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J221J2□□H03□	COG (EIA)	630Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J271J2□□H03□	COG (EIA)	630Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J331J2□□H03□	COG (EIA)	630Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J391J2□□H03□	COG (EIA)	630Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J471J2 H03	COG (EIA)	630Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J561J2□□H03□	COG (EIA)	630Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J681J2□□H03□	COG (EIA)	630Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J821J2□□H03□	COG (EIA)	630Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J102J2 H03	COG (EIA)	630Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J122J2□□H03□	COG (EIA)	630Vdc	1200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J152J2 H03	COG (EIA)	630Vdc	1500pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J182J2□□H03□	COG (EIA)	630Vdc	1800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J222J2 H03	COG (EIA)	630Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J272J2 H03	COG (EIA)	630Vdc	2700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J332J2 H03	COG (EIA)	630Vdc	3300pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A100J2 H03	COG (EIA)	1000Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A120J2 H03	COG (EIA)	1000Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A150J2 H03	COG (EIA)	1000Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A180J2 H03	COG (EIA)	1000Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A220J2 H03	COG (EIA)	1000Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A270J2 H03	COG (EIA)	1000Vdc	27pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A330J2 H03	COG (EIA)	1000Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A390J2 H03	COG (EIA)	1000Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A470J2 H03	COG (EIA)	1000Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A560J2 H03	COG (EIA)	1000Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A680J2 H03	COG (EIA)	1000Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A820J2 H03	COG (EIA)	1000Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A101J2 H03	COG (EIA)	1000Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A121J2 H03	COG (EIA)	1000Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A151J2 H03	COG (EIA)	1000Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A181J2 H03	COG (EIA)	1000Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A221J2 H03	COG (EIA)	1000Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A271J2 H03	COG (EIA)	1000Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A331J2	COG (EIA)	1000Vdc 1000Vdc	330pF±5%	5.5×4.0 5.5×4.0	3.15 3.15	5.0	K1	M1
RCE5C3A471J2 H03	COG (EIA)	1000Vdc	390pF±5% 470pF±5%	5.5×4.0 5.5×4.0	3.15	5.0 5.0	K1 K1	M1 M1
RCE5C3A561J2 H03	COG (EIA)	1000Vdc	560pF±5%	5.5×4.0 5.5×4.0	3.15	5.0	K1	M1
RCE5C3A681J2 H03	COG (EIA)	1000Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCLJCJA061J2	COG (EIA)	1000,400	000hL±240	J.3×4.U	3.13	3.0	I/T	1,17

Capacitament	Continued from the preceding pa				Dimensions	Dimension	Lead Space	Lead Style	Lead Style
RCESTURABELIZITHOSIS   COG (RIA)   1000Web   1000FF5%   5.5-4.0   3.15   5.0   K1   M1   RCETURABERISIAN   1000FF5%   4.0-3.5   3.15   5.0   K1   M1   RCETURABERISIAN   1000FF5%   5.5-4.0   3.15   5.0   K1   M1   RCETURABERISIAN   1000FF5%   5.5-	Part Number			Capacitance	LxW	T	F F	Code	Code
RESERVATION   COC   EAN   1000/et   1000/et   5.5 + 0.0   3.15   5.0   K1   M1   REFUZICION   COC	RCE5C3A821J2□□H03□			820pF+5%	, ,	<u> </u>	, ,		
RCETUZESIJI		, ,		· ·					
RCETUZESSIJI		, ,		· ·					
RCETUZESSIJI		· ,		· ·					
RCETUZERS3111		` '		· ·					
RCETUZERS311		` '		· ·					
RCETUZEGEGIJI   H03		` ,	250Vdc	•	4.0×3.5	3.15	5.0	K1	M1
RCETUZE102JII   H03	RCE7U2E681J1□□H03□	` ,	250Vdc	· ·	4.0×3.5	3.15	5.0	K1	M1
RCETUZER2ZJITTH03  UJJ (EIA) 250Vdc   2200Pf=5%   40-3.5   3.15   5.0   K1   M1   RCETUZER3ZJITTH03  UJJ (EIA) 250Vdc   3300Pf=5%   40-3.5   3.15   5.0   K1   M1   RCETUZER3ZJITTH03  UJJ (EIA) 250Vdc   4700Pf=5%   40-3.5   3.15   5.0   K1   M1   RCETUZER6ZJITTH03  UJJ (EIA) 250Vdc   6800Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZERGZJITTH03  UJJ (EIA) 250Vdc   6800Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIOJITH03  UJJ (EIA) 630Vdc   1000Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIOJITH03  UJJ (EIA) 630Vdc   100Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIJOJITH03  UJJ (EIA) 630Vdc   22Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIJOJITH03  UJJ (EIA) 630Vdc   22Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIJOJITH03  UJJ (EIA) 630Vdc   22Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIJOJITH03  UJJ (EIA) 630Vdc   68Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIJOJITH03  UJJ (EIA) 630Vdc   68Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIJOJITH03  UJJ (EIA) 630Vdc   100Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIJOJITH03  UJJ (EIA) 630Vdc   100Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIJOJITH03  UJJ (EIA) 630Vdc   150Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIZIJUZIH03  UJJ (EIA) 630Vdc   150Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIZIJUZIH03  UJJ (EIA) 630Vdc   150Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIZIJUZIH03  UJJ (EIA) 630Vdc   680Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIZIJUZIH03  UJJ (EIA) 630Vdc   630Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIZIJUZIH03  UJJ (EIA) 630Vdc   630Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIJIJUZIH03  UJJ (EIA) 630Vdc   630Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIJIJUZIH03  UJJ (EIA) 630Vdc   630Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIJIJUZIH03  UJJ (EIA) 630Vdc   630Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIJIJUZIH03  UJJ (EIA) 630Vdc   630Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIJIJUZIH03  UJJ (EIA) 630Vdc   630Pf=5%   55-4.0   3.15   5.0   K1   M1   RCETUZIJIJUZIH03  UJJ (EIA) 630Vdc   630Pf=5%   55	RCE7U2E102J1 H03	U2J (EIA)	250Vdc	1000pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCETUZER32211   HO31	RCE7U2E152J1 H03	U2J (EIA)	250Vdc	1500pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCETUZIEGEGIZI   HO3T	RCE7U2E222J1□□H03□	U2J (EIA)	250Vdc	2200pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCETUZIGEGIZI_HO3  U2J(EIA)   250Vdc   5000pf:5%   5.5:4.0   3.15   5.0   K1   M1   RCETUZIGEGIZI_HO3  U2J(EIA)   630Vdc   10pf:5%   5.5:4.0   3.15   5.0   K1   M1   RCETUZIGEZIZI_HO3  U2J(EIA)   630Vdc   10pf:5%   5.5:4.0   3.15   5.0   K1   M1   RCETUZIGEZIZI_HO3  U2J(EIA)   630Vdc   10pf:5%   5.5:4.0   3.15   5.0   K1   M1   RCETUZIGEZIZIZI_HO3  U2J(EIA)   630Vdc   22pf:5%   5.5:4.0   3.15   5.0   K1   M1   RCETUZIGEZIZIZI_HO3  U2J(EIA)   630Vdc   22pf:5%   5.5:4.0   3.15   5.0   K1   M1   RCETUZIGEZIZIZIZIZIZIZIZIZIZIZIZIZIZIZIZIZIZI	RCE7U2E332J1 H03	U2J (EIA)	250Vdc	3300pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCETUZ210212   HO3	RCE7U2E472J1 H03	U2J (EIA)	250Vdc	4700pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCETU2J10J2   H03	RCE7U2E682J2□□H03□	U2J (EIA)	250Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCETU2J150J2   H03	RCE7U2E103J2 H03	U2J (EIA)	250Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCETU2J32J2     H03    U2J (EIA)   630Vdc   33PF5%   5.5+4.0   3.15   5.0   K1   M1   RCETU2J33OJ2   H03    U2J (EIA)   630Vdc   47PF5%   5.5+4.0   3.15   5.0   K1   M1   RCETU2J30J2   H03    U2J (EIA)   630Vdc   68PF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ68OJ2   H03    U2J (EIA)   630Vdc   68PF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ68OJ2   H03    U2J (EIA)   630Vdc   100PF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ101J2   H03    U2J (EIA)   630Vdc   100PF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ23J1Z   H03    U2J (EIA)   630Vdc   22OPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ33J1Z   H03    U2J (EIA)   630Vdc   33OPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ33J1Z   H03    U2J (EIA)   630Vdc   68OPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ33J1Z   H03    U2J (EIA)   630Vdc   68OPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ33J1Z   H03    U2J (EIA)   630Vdc   68OPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ32IZ   H03    U2J (EIA)   630Vdc   68OPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ2ZIZ   H03    U2J (EIA)   630Vdc   150OPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ2ZIZ   H03    U2J (EIA)   630Vdc   150OPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ33J3Z   H03    U2J (EIA)   630Vdc   22OOPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ33J3Z   H03    U2J (EIA)   630Vdc   68OOPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ33J3Z   H03    U2J (EIA)   630Vdc   68OOPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ33J3Z   H03    U2J (EIA)   630Vdc   68OOPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ33J3Z   H03    U2J (EIA)   630Vdc   68OOPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ33J3Z   H03    U2J (EIA)   630Vdc   68OOPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ33J3Z   H03    U2J (EIA)   630Vdc   150OPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ33J3Z   H03    U2J (EIA)   630Vdc   68OOPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ33JZ   H03    U2J (EIA)   630Vdc   68OOPF5%   5.5+4.0   3.15   5.0   K1   M1   RCETUZJ33JZ   H03    U2J (EIA)   630Vdc   68OOPF5%   5.5+4.0	RCE7U2J100J2 H03	U2J (EIA)	630Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCETUZJA30J2	RCE7U2J150J2□□H03□	U2J (EIA)	630Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J470J2	RCE7U2J220J2□□H03□	U2J (EIA)	630Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J680J2	RCE7U2J330J2□□H03□	U2J (EIA)	630Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J151J2	RCE7U2J470J2□□H03□	U2J (EIA)	630Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J22J2]	RCE7U2J680J2□□H03□	U2J (EIA)	630Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J331J2    HO3    U2J (EIA)   630Vdc   220PF±5%   5.5×4.0   3.15   5.0   K1   M1   RCE7U2J331J2    HO3    U2J (EIA)   630Vdc   330PF±5%   5.5×4.0   3.15   5.0   K1   M1   RCE7U2J361J2    HO3    U2J (EIA)   630Vdc   470PF±5%   5.5×4.0   3.15   5.0   K1   M1   RCE7U2J361J2    HO3    U2J (EIA)   630Vdc   680Pf±5%   5.5×4.0   3.15   5.0   K1   M1   RCE7U2J102J2    HO3    U2J (EIA)   630Vdc   1000Pf±5%   5.5×4.0   3.15   5.0   K1   M1   RCE7U2J102J2    HO3    U2J (EIA)   630Vdc   1500Pf±5%   5.5×4.0   3.15   5.0   K1   M1   RCE7U2J132J2    HO3    U2J (EIA)   630Vdc   2200Pf±5%   5.5×4.0   3.15   5.0   K1   M1   RCE7U2J323J2    HO3    U2J (EIA)   630Vdc   2200Pf±5%   5.5×4.0   3.15   5.0   K1   M1   RCE7U2J32J2    HO3    U2J (EIA)   630Vdc   4700Pf±5%   5.5×4.0   3.15   5.0   K1   M1   RCE7U2J303J3    HO3    U2J (EIA)   630Vdc   6800Pf±5%   5.5×5.0   4.0   5.0   K1   M1   RCE7U2J303J3    HO3    U2J (EIA)   630Vdc   6800Pf±5%   5.5×5.0   4.0   5.0   K1   M1   RCE7U2J303J3    HO3    U2J (EIA)   630Vdc   6800Pf±5%   5.5×5.0   4.0   5.0   K1   M1   RCE7U2J333J5    HO3    U2J (EIA)   630Vdc   10000Pf±5%   5.5×5.0   4.0   5.0   K1   M1   RCE7U2J333J5    HO3    U2J (EIA)   630Vdc   2000Pf±5%   7.5×5.5   4.0   5.0   K1   M1   RCE7U2J333J5    HO3    U2J (EIA)   630Vdc   2000Pf±5%   7.5×5.5   4.0   5.0   K1   M1   RCE7U2J333J5    HO3    U2J (EIA)   630Vdc   2000Pf±5%   7.5×6.0   4.0   5.0   B1   E1   RCE7U2J33JU    HO3    U2J (EIA)   630Vdc   47000Pf±5%   7.5×6.0   4.0   5.0   B1   E1   RCE7U2J343U    HO3    U2J (EIA)   630Vdc   47000Pf±5%   7.5×6.0   4.0   5.0   B1   E1   RCE7U2J343U    HO3    U2J (EIA)   630Vdc   47000Pf±5%   5.5×4.0   3.15   5.0   K1   M1   RCE7U3A30J2    HO3    U2J (EIA)   1000Vdc   10Pf±5%   5.5×4.0   3.15   5.0   K1   M1   RCE7U3A30J2    HO3    U2J (EIA)   1000Vdc   10Pf±5%   5.5×4.0   3.15   5.0   K1   M1   RCE7U3A30J2    HO3    U2J (EIA)   1000Vdc   20Pf±5%   5.5×4.0   3.15   5.0   K1   M1   RCE7U3A33J2    HO3    U2J (EIA)   1000Vdc   20Pf±5%   5.5×4.0   3.15   5.0   K1   M1   RCE7U3A33J2    HO3	RCE7U2J101J2 H03	U2J (EIA)	630Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J31J2_HO3_	RCE7U2J151J2□□H03□	U2J (EIA)	630Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCETUZJ471J2	RCE7U2J221J2 H03	U2J (EIA)	630Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCETU2J162 HO3  U2J_(EIA)	RCE7U2J331J2 H03	U2J (EIA)	630Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J102J2	RCE7U2J471J2 H03	U2J (EIA)	630Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J152J2	RCE7U2J681J2 H03	U2J (EIA)	630Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J222J2		U2J (EIA)		1000pF±5%		3.15			M1
RCE7U2J332J2□H03□ U2J (EIA) 630Vdc 3300pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U2J472J2□H03□ U2J (EIA) 630Vdc 4700pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U2J682J3□H03□ U2J (EIA) 630Vdc 6800pF±5% 5.5×5.0 4.0 5.0 K1 M1   RCE7U2J163J3□H03□ U2J (EIA) 630Vdc 15000pF±5% 5.5×5.0 4.0 5.0 K1 M1   RCE7U2J153J4□H03□ U2J (EIA) 630Vdc 15000pF±5% 7.5×5.5 4.0 5.0 K1 M1   RCE7U2J233J3□H03□ U2J (EIA) 630Vdc 12000pF±5% 7.5×5.5 4.0 5.0 K1 M1   RCE7U2J233J3□H03□ U2J (EIA) 630Vdc 22000pF±5% 7.5×5.5 4.0 5.0 K1 M1   RCE7U2J233J3□H03□ U2J (EIA) 630Vdc 3300pF±5% 7.5×8.0 4.0 5.0 B1 E1   RCE7U2J473J5□H03□ U2J (EIA) 630Vdc 47000pF±5% 7.5×8.0 4.0 5.0 B1 E1   RCE7U2J43JU□H03□ U2J (EIA) 630Vdc 94000pF±5% 7.5×8.0 4.0 5.0 B1 E1   RCE7U2J43JU□H03□ U2J (EIA) 630Vdc 94000pF±5% 7.5×8.0 4.0 5.0 B1 E1   RCE7U3J43JU□H03□ U2J (EIA) 1000Vdc 15pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A150J2□H03□ U2J (EIA) 1000Vdc 15pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A220J2□H03□ U2J (EIA) 1000Vdc 15pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A470J2□H03□ U2J (EIA) 1000Vdc 47pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A470J2□H03□ U2J (EIA) 1000Vdc 47pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A480J2□H03□ U2J (EIA) 1000Vdc 47pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A470J2□H03□ U2J (EIA) 1000Vdc 15pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A470J2□H03□ U2J (EIA) 1000Vdc 15pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A470J2□H03□ U2J (EIA) 1000Vdc 150pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A470J2□H03□ U2J (EIA) 1000Vdc 150pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A47J2□H03□ U2J (EIA) 1000Vdc 150pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A422J2□H03□ U2J (EIA) 1000Vdc 150pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A422J2□H03□ U2J (EIA) 1000Vdc 150pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A422J2□H03□ U2J (EIA) 1000Vdc 150pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A422J2□H03□ U2J (EIA) 1000Vdc 150pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A422J3□H03□ U2J (EIA) 1000Vdc 150pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A422J3□H03□ U2J (EIA) 1000Vdc 150pF±5% 5.5×4.0 3.15 5.0 K1 M1   RCE7U3A422J3□H03□ U2J (EIA) 1000Vdc 150pF±5% 5.5×5.0 4.0 5.0 K1 M1   RCE7U3A422J3□H03□ U2J (EIA)				· ·					
RCE7U2J472J2□□HO3□         U2J(EIA)         630Vdc         4700pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U2J682J3□□HO3□         U2J(EIA)         630Vdc         6800pF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U2J103J3□□HO3□         U2J(EIA)         630Vdc         10000pF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U2J153J4□□HO3□         U2J(EIA)         630Vdc         2000pF±5%         7.5×5.5         4.0         5.0         K1         M1           RCE7U2J23J3J□□HO3□         U2J(EIA)         630Vdc         23000pF±5%         7.5×8.0         4.0         5.0         K1         M1           RCE7U2J373J□□HO3□         U2J(EIA)         630Vdc         23000pF±5%         7.5×8.0         4.0         5.0         B1         E1           RCE7U2J473J5□HO3□         U2J(EIA)         630Vdc         47000pF±5%         7.5×8.0         4.0         5.0         B1         E1           RCE7U3A150J2□HO3□         U2J(EIA)         1000Vdc         10pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A150J2□HO3□         U2J(EIA)         1000Vdc         22pF±5%         <		· ,		· ·					
RCE7U2J682J3□□HO3□         U2J(EIA)         630Vdc         6800pF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U2J103J3□□HO3□         U2J(EIA)         630Vdc         10000pF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U2J153J4□□HO3□         U2J(EIA)         630Vdc         15000pF±5%         7.5×5.5         4.0         5.0         K1         M1           RCE7U2J23J4□□HO3□         U2J(EIA)         630Vdc         22000pF±5%         7.5×5.5         4.0         5.0         K1         M1           RCE7U2J33J5□□HO3□         U2J(EIA)         630Vdc         47000pF±5%         7.5×8.0         4.0         5.0         B1         E1           RCE7U2J473J5□□HO3□         U2J(EIA)         630Vdc         47000pF±5%         7.5×8.0         4.0         5.0         B1         E1           RCE7U3A100J2□□HO3□         U2J(EIA)         1000Vdc         10pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A220J2□□HO3□         U2J(EIA)         1000Vdc         22pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A360J2□□HO3□         U2J(EIA)         1000Vdc         68pF±5%		, ,		· ·					
RCE7U2J103J3		` '							
RCE7U2J153J4□H03□         U2J (EIA)         630Vdc         15000pF±5%         7.5×5.5         4.0         5.0         K1         M1           RCE7U2J23J4□H03□         U2J (EIA)         630Vdc         22000pF±5%         7.5×5.5         4.0         5.0         K1         M1           RCE7U2J333J5□H03□         U2J (EIA)         630Vdc         23000pF±5%         7.5×8.0         4.0         5.0         B1         E1           RCE7U2J473J5□H03□         U2J (EIA)         630Vdc         47000pF±5%         7.5×8.0         4.0         5.0         B1         E1           RCE7U2J943JU□H03□         U2J (EIA)         630Vdc         94000pF±5%         7.5×8.0         4.0         5.0         B1         E1           RCE7U3A150J2□H03□         U2J (EIA)         1000Vdc         10pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A150J2□H03□         U2J (EIA)         1000Vdc         15p±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A230J2□H03□         U2J (EIA)         1000Vdc         23p±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A30J2□H03□         U2J (EIA)         1000Vdc         68p±5% <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>									
RCE7U2J223J4□HO3□ U2J (EIA)         630Vdc         22000pF±5%         7.5×5.5         4.0         5.0         K1         M1           RCE7U2J333J5□HO3□ U2J (EIA)         630Vdc         33000pF±5%         7.5×8.0         4.0         5.0         B1         E1           RCE7U2J473J5□HO3□ U2J (EIA)         630Vdc         47000pF±5%         7.5×8.0         4.0         5.0         B1         E1           RCE7U2J943JU□HO3□ U2J (EIA)         630Vdc         94000pF±5%         7.7×13.0         4.0         5.0         B1         E1           RCE7U3A150J2□HO3□ U2J (EIA)         1000Vdc         10pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A220J2□HO3□ U2J (EIA)         1000Vdc         15pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A330J2□HO3□ U2J (EIA)         1000Vdc         22pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A470J2□HO3□ U2J (EIA)         1000Vdc         47pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A680J2□HO3□ U2J (EIA)         1000Vdc         68pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A515J2□HO3□ U		` '		•					
RCE7U2J333J5□H03□         U2J (EIA)         630Vdc         33000pF±5%         7.5×8.0         4.0         5.0         B1         E1           RCE7U2J473J5□H03□         U2J (EIA)         630Vdc         47000pF±5%         7.5×8.0         4.0         5.0         B1         E1           RCE7U2J943JU□H03□         U2J (EIA)         630Vdc         94000pF±5%         7.7×13.0         4.0         5.0         B1         E1           RCE7U3A100J2□H03□         U2J (EIA)         1000Vdc         10pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A220J2□H03□         U2J (EIA)         1000Vdc         22pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A30J2□H03□         U2J (EIA)         1000Vdc         22pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A470J2□H03□         U2J (EIA)         1000Vdc         47p±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A680J2□H03□         U2J (EIA)         1000Vdc         68p±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A151J2□H03□         U2J (EIA)         1000Vdc         100pF±5%		, ,		-					
RCE7U2J473J5         HO3         U2J (EIA)         630Vdc         47000pF±5%         7.5×8.0         4.0         5.0         B1         E1           RCE7U2J943JU         HO3         U2J (EIA)         630Vdc         94000pF±5%         7.7×13.0         4.0         5.0         B1         E1           RCE7U3A100J2         HO3         U2J (EIA)         1000Vdc         10pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A220J2         HO3         U2J (EIA)         1000Vdc         22pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A330J2         HO3         U2J (EIA)         1000Vdc         22pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A370J2         HO3         U2J (EIA)         1000Vdc         47p±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A680J2         HO3         U2J (EIA)         1000Vdc         68p±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A151J2         HO3         U2J (EIA)         1000Vdc         150pF±5%         5.5×4.0         3.15         5.0         K1         M1		` '		· ·					
RCE7UZJ943JU□H03□         U2J (EIA)         630Vdc         94000pf±5%         7.7×13.0         4.0         5.0         B1         E1           RCE7U3A100J2□H03□         U2J (EIA)         1000Vdc         10pf±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A150J2□H03□         U2J (EIA)         1000Vdc         15pf±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A322OJ2□H03□         U2J (EIA)         1000Vdc         22pf±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A370J2□H03□         U2J (EIA)         1000Vdc         47pf±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A680J2□H03□         U2J (EIA)         1000Vdc         68pf±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A101J2□H03□         U2J (EIA)         1000Vdc         100pf±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A221J2□H03□         U2J (EIA)         1000Vdc         150pf±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A331J2□H03□         U2J (EIA)         1000Vdc         220pf±5%		` ,		· ·					
RCE7U3A100J2□H03□         U2J (EIA)         1000Vdc         10pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A150J2□H03□         U2J (EIA)         1000Vdc         15pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A220J2□H03□         U2J (EIA)         1000Vdc         22pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A330J2□H03□         U2J (EIA)         1000Vdc         47pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A470J2□H03□         U2J (EIA)         1000Vdc         47pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A680J2□H03□         U2J (EIA)         1000Vdc         68pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A15J2□H03□         U2J (EIA)         1000Vdc         150pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A33J2□H03□         U2J (EIA)         1000Vdc         20pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A68J2□H03□         U2J (EIA)         1000Vdc         30pF±5%		, ,							
RCE7U3A150J2		` '		· ·					
RCE7U3A220J2 H03         U2J (EIA)         1000Vdc         22pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A330J2 H03         U2J (EIA)         1000Vdc         33pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A470J2 H03         U2J (EIA)         1000Vdc         47pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A680J2 H03         U2J (EIA)         1000Vdc         68pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A101J2 H03         U2J (EIA)         1000Vdc         100pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A221J2 H03         U2J (EIA)         1000Vdc         220pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A331J2 H03         U2J (EIA)         1000Vdc         230pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A471J2 H03         U2J (EIA)         1000Vdc         470pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A681J2 H03         U2J (EIA)         1000Vdc         680pF±5%         5.5		, ,		· ·					
RCE7U3A330J2H03_         U2J (EIA)         1000Vdc         33pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A470J2H03_         U2J (EIA)         1000Vdc         47pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A680J2H03_         U2J (EIA)         1000Vdc         68pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A101J2H03_         U2J (EIA)         1000Vdc         100pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A221J2H03_         U2J (EIA)         1000Vdc         220pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A331J2H03H03_         U2J (EIA)         1000Vdc         220pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A47J2H03H03U2J (EIA)         1000Vdc         470pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A152J3H03U2J (EIA)         1000Vdc         680pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A222J3H03U2J (EIA)         1000Vdc         1500pF±5%         5.5×5.0		` '		· ·					
RCE7U3A470J2		` ,		· ·					
RCE7U3A680J2         HO3         U2J (EIA)         1000Vdc         68pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A101J2         HO3         U2J (EIA)         1000Vdc         100pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A151J2         HO3         U2J (EIA)         1000Vdc         150pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A221J2         HO3         U2J (EIA)         1000Vdc         220pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A331J2         HO3         U2J (EIA)         1000Vdc         330pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A681J2         HO3         U2J (EIA)         1000Vdc         680pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A102J2         HO3         U2J (EIA)         1000Vdc         1000PF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A152J3         HO3         U2J (EIA)         1000Vdc         1500PF±5%         5.5×5.0         4.0         5.0         K1         M1 </th <th></th> <th>` ,</th> <th></th> <th>· ·</th> <th></th> <th></th> <th></th> <th></th> <th></th>		` ,		· ·					
RCE7U3A101J2         H03         U2J (EIA)         1000Vdc         100pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A151J2         H03         U2J (EIA)         1000Vdc         150pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A221J2         H03         U2J (EIA)         1000Vdc         220pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A331J2         H03         U2J (EIA)         1000Vdc         330pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A471J2         H03         U2J (EIA)         1000Vdc         470pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A681J2         H03         U2J (EIA)         1000Vdc         680pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A152J3         H03         U2J (EIA)         1000Vdc         1500pF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U3A332J4         H03         U2J (EIA)         1000Vdc         2200pF±5%         5.5×5.5         4.0         5.0         K1         M1 </th <th></th> <th>, ,</th> <th></th> <th>· ·</th> <th></th> <th></th> <th></th> <th></th> <th></th>		, ,		· ·					
RCE7U3A151J2         HO3         U2J (EIA)         1000Vdc         150pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A221J2         HO3         U2J (EIA)         1000Vdc         220pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A331J2         HO3         U2J (EIA)         1000Vdc         330pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A471J2         HO3         U2J (EIA)         1000Vdc         470pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A681J2         HO3         U2J (EIA)         1000Vdc         680pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A102J2         HO3         U2J (EIA)         1000Vdc         1000pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A222J3         HO3         U2J (EIA)         1000Vdc         200pF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U3A332J4         HO3         U2J (EIA)         1000Vdc         3300pF±5%         7.5×5.5         4.0         5.0         K1         M1 </th <th></th> <th>, ,</th> <th>1</th> <th>· ·</th> <th></th> <th></th> <th></th> <th></th> <th></th>		, ,	1	· ·					
RCE7U3A221J2         HO3         U2J (EIA)         1000Vdc         220pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A331J2         HO3         U2J (EIA)         1000Vdc         330pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A471J2         HO3         U2J (EIA)         1000Vdc         470pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A681J2         HO3         U2J (EIA)         1000Vdc         680pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A102J2         HO3         U2J (EIA)         1000Vdc         1000pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A152J3         HO3         U2J (EIA)         1000Vdc         1500pF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U3A322J3         HO3         U2J (EIA)         1000Vdc         2200pF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U3A472J4         HO3         U2J (EIA)         1000Vdc         4700pF±5%         7.5×5.5         4.0         5.0         K1         M1     <		, ,	1	· ·					
RCE7U3A331J2         HO3         U2J (EIA)         1000Vdc         330pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A471J2         HO3         U2J (EIA)         1000Vdc         470pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A681J2         HO3         U2J (EIA)         1000Vdc         680pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A102J2         HO3         U2J (EIA)         1000Vdc         1000pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A152J3         HO3         U2J (EIA)         1000Vdc         1500pF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U3A222J3         HO3         U2J (EIA)         1000Vdc         2200pF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U3A332J4         HO3         U2J (EIA)         1000Vdc         4700pF±5%         7.5×5.5         4.0         5.0         K1         M1           RCE7U3A472J4         HO3         U2J (EIA)         1000Vdc         4700pF±5%         7.5×5.5         4.0         5.0         K1         M1     <		` '	1	· ·					
RCE7U3A681J2         H03         U2J (EIA)         1000Vdc         680pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A102J2         H03         U2J (EIA)         1000Vdc         1000pF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A152J3         H03         U2J (EIA)         1000Vdc         1500pF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U3A222J3         H03         U2J (EIA)         1000Vdc         2200pF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U3A332J4         H03         U2J (EIA)         1000Vdc         3300pF±5%         7.5×5.5         4.0         5.0         K1         M1           RCE7U3A472J4         H03         U2J (EIA)         1000Vdc         4700pF±5%         7.5×5.5         4.0         5.0         K1         M1		, ,		· ·	5.5×4.0		5.0	K1	M1
RCE7U3A102J2         H03         U2J (EIA)         1000Vdc         1000PF±5%         5.5×4.0         3.15         5.0         K1         M1           RCE7U3A152J3         H03         U2J (EIA)         1000Vdc         1500PF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U3A222J3         H03         U2J (EIA)         1000Vdc         2200PF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U3A332J4         H03         U2J (EIA)         1000Vdc         3300PF±5%         7.5×5.5         4.0         5.0         K1         M1           RCE7U3A472J4         H03         U2J (EIA)         1000Vdc         4700PF±5%         7.5×5.5         4.0         5.0         K1         M1	RCE7U3A471J2□□H03□	U2J (EIA)	1000Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A152J3         H03         U2J (EIA)         1000Vdc         1500pF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U3A222J3         H03         U2J (EIA)         1000Vdc         2200pF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U3A332J4         H03         U2J (EIA)         1000Vdc         3300pF±5%         7.5×5.5         4.0         5.0         K1         M1           RCE7U3A472J4         H03         U2J (EIA)         1000Vdc         4700pF±5%         7.5×5.5         4.0         5.0         K1         M1	RCE7U3A681J2□□H03□	U2J (EIA)	1000Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A222J3         H03         U2J (EIA)         1000Vdc         2200pF±5%         5.5×5.0         4.0         5.0         K1         M1           RCE7U3A332J4         H03         U2J (EIA)         1000Vdc         3300pF±5%         7.5×5.5         4.0         5.0         K1         M1           RCE7U3A472J4         H03         U2J (EIA)         1000Vdc         4700pF±5%         7.5×5.5         4.0         5.0         K1         M1	RCE7U3A102J2□□H03□	U2J (EIA)	1000Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A332J4 H03       U2J (EIA)       1000Vdc       3300pF±5%       7.5×5.5       4.0       5.0       K1       M1         RCE7U3A472J4 H03       U2J (EIA)       1000Vdc       4700pF±5%       7.5×5.5       4.0       5.0       K1       M1	RCE7U3A152J3□□H03□	U2J (EIA)	1000Vdc	1500pF±5%	5.5×5.0	4.0	5.0	K1	M1
RCE7U3A472J4□□H03□         U2J (EIA)         1000Vdc         4700pF±5%         7.5×5.5         4.0         5.0         K1         M1	RCE7U3A222J3□□H03□	U2J (EIA)	1000Vdc	2200pF±5%	5.5×5.0	4.0	5.0	K1	M1
	RCE7U3A332J4□□H03□	U2J (EIA)	1000Vdc	3300pF±5%	7.5×5.5	4.0	5.0	K1	M1
RCE7U3A682J5□□H03□         U2J (EIA)         1000Vdc         6800pF±5%         7.5×8.0         4.0         5.0         B1         E1	RCE7U3A472J4□□H03□	U2J (EIA)	1000Vdc	4700pF±5%	7.5×5.5	4.0	5.0	K1	M1
	RCE7U3A682J5□□H03□	U2J (EIA)	1000Vdc	6800pF±5%	7.5×8.0	4.0	5.0	B1	E1

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE7U3A103J5□□H03□	U2J (EIA)	1000Vdc	10000pF±5%	7.5×8.0	4.0	5.0	B1	E1
RCE7U3A203JU□□H03□	U2J (EIA)	1000Vdc	20000pF±5%	7.7×13.0	4.0	5.0	B1	E1

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code. The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

## ■ High Dielectric Constant Type, X7R/X7S Characteristics

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCER71E104K0□□H03□	X7R (EIA)	25Vdc	0.1µF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71E104K0□□H03□	X7R (EIA)	25Vdc	0.1µF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71E154K0□□H03□	X7R (EIA)	25Vdc	0.15µF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71E154K0□□H03□	X7R (EIA)	25Vdc	0.15µF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71E224K0□□H03□	X7R (EIA)	25Vdc	0.22µF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71E224K0□□H03□	X7R (EIA)	25Vdc	0.22µF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71E334K1□□H03□	X7R (EIA)	25Vdc	0.33µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71E334K1□□H03□	X7R (EIA)	25Vdc	0.33µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71E474K1□□H03□	X7R (EIA)	25Vdc	0.47µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71E474K1 H03	X7R (EIA)	25Vdc	0.47µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71E684K1□□H03□	X7R (EIA)	25Vdc	0.68µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71E684K1□□H03□	X7R (EIA)	25Vdc	0.68µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71E105K1□□H03□	X7R (EIA)	25Vdc	1.0µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71E105K1 H03	X7R (EIA)	25Vdc	1.0µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71E155K2 H03	X7R (EIA)	25Vdc	1.5µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71E155K2□□H03□	X7R (EIA)	25Vdc	1.5µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71E225K2□□H03□	X7R (EIA)	25Vdc	2.2µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71E225K2□□H03□	X7R (EIA)	25Vdc	2.2µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71E335K2□□H03□	X7R (EIA)	25Vdc	3.3µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71E335K2□□H03□	X7R (EIA)	25Vdc	3.3µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71E475K2□□H03□	X7R (EIA)	25Vdc	4.7µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71E475K2□□H03□	X7R (EIA)	25Vdc	4.7µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71E106K3□□H03□	X7R (EIA)	25Vdc	10µF±10%	5.5×5.0	4.0	2.5	A2	DB
RCER71E106K3□□H03□	X7R (EIA)	25Vdc	10µF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER71E226MW□□H03□	X7R (EIA)	25Vdc	22µF±20%	5.5×7.5	4.0	5.0	K1	M1
RCER71H221K0□□H03□	X7R (EIA)	50Vdc	220pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H221K0□□H03□	X7R (EIA)	50Vdc	220pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H331K0□□H03□	X7R (EIA)	50Vdc	330pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H331K0□□H03□	X7R (EIA)	50Vdc	330pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H471K0 H03	X7R (EIA)	50Vdc	470pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H471K0 H03	X7R (EIA)	50Vdc	470pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H681K0□□H03□	X7R (EIA)	50Vdc	680pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H681K0 H03	X7R (EIA)	50Vdc	680pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H102K0 H03	X7R (EIA)	50Vdc	1000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H102K0 H03	X7R (EIA)	50Vdc	1000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H152K0 H03	X7R (EIA)	50Vdc	1500pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H152K0 H03	X7R (EIA)	50Vdc	1500pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H222K0 H03	X7R (EIA)	50Vdc	2200pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H222K0 H03	X7R (EIA)	50Vdc	2200pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H332K0 H03	X7R (EIA)	50Vdc	3300pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H332K0 H03	X7R (EIA)	50Vdc	3300pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H472K0 H03	X7R (EIA)	50Vdc	4700pF±10%	3.6×3.5	2.5	2.5	A2	DB M1
RCER71H472K0 H03	X7R (EIA)	50Vdc	4700pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H682K0 H03	X7R (EIA)	50Vdc	6800pF±10%	3.6×3.5	2.5	2.5	A2	DB M1
RCER71H682K0 H03	X7R (EIA)	50Vdc	6800pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H103K0 H03	X7R (EIA)	50Vdc	10000pF±10%	3.6×3.5	2.5	2.5	A2	DB M1
RCER71H103K0 H03	X7R (EIA)	50Vdc	10000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H153K0□□H03□	X7R (EIA)	50Vdc	15000pF±10%	3.6×3.5	2.5	2.5	A2	DB lowing page <b>1</b>

Continued from the preceding pa	Temp.	Rated		Dimensions	Dimension	Lead Space	Lead Style	Lead Style
Part Number	Char.	Voltage	Capacitance	LxW (mm)	(mm)	(mm)	Code Bulk	Code Taping
RCER71H153K0□□H03□	X7R (EIA)	50Vdc	15000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H223K0□□H03□	X7R (EIA)	50Vdc	22000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H223K0□□H03□	X7R (EIA)	50Vdc	22000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H333K0□□H03□	X7R (EIA)	50Vdc	33000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H333K0□□H03□	X7R (EIA)	50Vdc	33000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H473K0□□H03□	X7R (EIA)	50Vdc	47000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H473K0 H03	X7R (EIA)	50Vdc	47000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H683K0 H03	X7R (EIA)	50Vdc	68000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H683K0 H03	X7R (EIA)	50Vdc	68000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H104K0 H03	X7R (EIA)	50Vdc	0.10µF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H104K0   H03   RCER71H154K1   H03	X7R (EIA) X7R (EIA)	50Vdc 50Vdc	0.10µF±10% 0.15µF±10%	3.6×3.5 4.0×3.5	2.5	5.0 2.5	K1 A2	M1 DB
RCER71H154K1 H03	X7R (EIA)	50Vdc	0.15μF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71H224K1 H03	X7R (EIA)	50Vdc	0.22µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71H224K1 H03	X7R (EIA)	50Vdc	0.22µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71H334K1 H03	X7R (EIA)	50Vdc	0.33µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71H334K1 H03	X7R (EIA)	50Vdc	0.33µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71H474K1□□H03□	X7R (EIA)	50Vdc	0.47µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71H474K1□□H03□	X7R (EIA)	50Vdc	0.47µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71H684K2□□H03□	X7R (EIA)	50Vdc	0.68µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71H684K2□□H03□	X7R (EIA)	50Vdc	0.68µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCEC71H105K1□□H03□	X7S (EIA)	50Vdc	1.0µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCEC71H105K1□□H03□	X7S (EIA)	50Vdc	1.0µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71H105K2□□H03□	X7R (EIA)	50Vdc	1.0µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71H105K2□□H03□	X7R (EIA)	50Vdc	1.0µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71H155K2 H03	X7R (EIA)	50Vdc	1.5µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71H155K2 H03	X7R (EIA)	50Vdc	1.5µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71H225K2 H03	X7R (EIA)	50Vdc	2.2µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71H225K2 H03 RCER71H335K3 H03	X7R (EIA) X7R (EIA)	50Vdc 50Vdc	2.2μF±10% 3.3μF±10%	5.5×4.0 5.5×5.0	3.15 4.0	5.0 2.5	K1 A2	M1 DB
RCER71H335K3 H03	X7R (EIA)	50Vdc	3.3µF±10%	5.5×5.0	4.0	5.0	K1	M1
RCEC71H475K2 H03	X7S (EIA)	50Vdc	4.7µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCEC71H475K2□□H03□	X7S (EIA)	50Vdc	4.7µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71H475K3□□H03□	X7R (EIA)	50Vdc	4.7µF±10%	5.5×5.0	4.0	2.5	A2	DB
RCER71H475K3□□H03□	X7R (EIA)	50Vdc	4.7µF±10%	5.5×5.0	4.0	5.0	K1	M1
RCEC71H106K3□□H03□	X7S (EIA)	50Vdc	10µF±10%	5.5×5.0	4.0	2.5	A2	DB
RCEC71H106K3□□H03□	X7S (EIA)	50Vdc	10μF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER71H106MW□□H03□	X7R (EIA)	50Vdc	10μF±20%	5.5×7.5	4.0	5.0	K1	M1
RCEC71H226MW□□H03□	` ′	50Vdc	22µF±20%	5.5×7.5	4.0	5.0	K1	M1
RCER72A221K0 H03	X7R (EIA)	100Vdc	220pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A221K0 H03	X7R (EIA)	100Vdc	220pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A331K0 H03 RCER72A331K0 H03	X7R (EIA) X7R (EIA)	100Vdc 100Vdc	330pF±10% 330pF±10%	3.6×3.5 3.6×3.5	2.5	2.5 5.0	A2 K1	DB M1
RCER72A471K0   H03	X7R (EIA)	100Vdc	470pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A471K0 H03	X7R (EIA)	100Vdc	470pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A681K0□□H03□	X7R (EIA)	100Vdc	680pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A681K0□□H03□	X7R (EIA)	100Vdc	680pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A102K0□□H03□	X7R (EIA)	100Vdc	1000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A102K0□□H03□	X7R (EIA)	100Vdc	1000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A152K0□□H03□	X7R (EIA)	100Vdc	1500pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A152K0□□H03□	X7R (EIA)	100Vdc	1500pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A222K0□□H03□	X7R (EIA)	100Vdc	2200pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A222K0□□H03□	X7R (EIA)	100Vdc	2200pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A332K0 H03	X7R (EIA)	100Vdc	3300pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A332K0 H03	X7R (EIA)	100Vdc	3300pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A472K0 H03	X7R (EIA)	100Vdc	4700pF±10%	3.6×3.5	2.5	2.5	A2	DB M1
RCER72A472K0□□H03□	X7R (EIA)	100Vdc	4700pF±10%	3.6×3.5	2.5	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW	Dimension T	Lead Space F	Lead Style Code	Lead Style Code
			C000=F+100/	(mm)	(mm)	(mm)	Bulk	Taping
RCER72A682K0 H03	X7R (EIA)	100Vdc	6800pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A682K0 H03	X7R (EIA)	100Vdc	6800pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A103K0 H03	X7R (EIA)	100Vdc	10000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A103K0 H03	X7R (EIA)	100Vdc	10000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A153K0 H03	X7R (EIA)	100Vdc	15000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A153KO HO3	X7R (EIA)	100Vdc	15000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A223K0 H03	X7R (EIA)	100Vdc	22000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A223K0 H03	X7R (EIA)	100Vdc	22000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A333K1 HO3	X7R (EIA)	100Vdc	33000pF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER72A333K1 HO3	X7R (EIA)	100Vdc	33000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER72A473K1 H03	X7R (EIA)	100Vdc	47000pF±10%	4.0×3.5	2.5	2.5	A2	DB M1
RCER72A473K1 H03	X7R (EIA)	100Vdc	47000pF±10%	4.0×3.5		5.0	K1	M1
RCER72A683K1 HO3	X7R (EIA)	100Vdc	68000pF±10%	4.0×3.5 4.0×3.5	2.5	2.5 5.0	A2	DB M1
RCER72A683K1 H03 RCER72A104K1 H03	X7R (EIA) X7R (EIA)	100Vdc 100Vdc	68000pF±10%	4.0×3.5 4.0×3.5	2.5	2.5	K1 A2	M1 DB
RCER72A104K1   H03	X7R (EIA)	100Vdc	0.10µF±10% 0.10µF±10%	4.0×3.5 4.0×3.5	2.5	5.0	K1	M1
RCER72A154K2 H03	X7R (EIA)	100Vdc	0.15μF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER72A154K2 H03	X7R (EIA)	100Vdc	0.15μF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72A134K2 H03	X7R (EIA)	100Vdc	0.13μ1±10% 0.22μF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER72A224K2 H03	X7R (EIA)	100Vdc	0.22µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72A334K1 H03	X7R (EIA)	100Vdc	0.33µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER72A334K1 H03	X7R (EIA)	100Vdc	0.33µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER72A474K2□□H03□	X7R (EIA)	100Vdc	0.47µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER72A474K2□□H03□	X7R (EIA)	100Vdc	0.47µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72A684K2□□H03□	X7R (EIA)	100Vdc	0.68µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER72A684K2□□H03□	X7R (EIA)	100Vdc	0.68µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72A105K2□□H03□	X7R (EIA)	100Vdc	1.0µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER72A105K2□□H03□	X7R (EIA)	100Vdc	1.0µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCEC72A155K3□□H03□	X7S (EIA)	100Vdc	1.5µF±10%	5.5×5.0	4.0	2.5	A2	DB
RCEC72A155K3□□H03□	X7S (EIA)	100Vdc	1.5µF±10%	5.5×5.0	4.0	5.0	K1	M1
RCEC72A225K3□□H03□	X7S (EIA)	100Vdc	2.2µF±10%	5.5×5.0	4.0	2.5	A2	DB
RCEC72A225K3□□H03□	X7S (EIA)	100Vdc	2.2µF±10%	5.5×5.0	4.0	5.0	K1	M1
RCEC72A475MW□□H03□	X7S (EIA)	100Vdc	4.7µF±20%	5.5×7.5	4.0	5.0	K1	M1
RCER72E102K1□□H03□	X7R (EIA)	250Vdc	1000pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E152K1□□H03□	X7R (EIA)	250Vdc	1500pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E222K1□□H03□	X7R (EIA)	250Vdc	2200pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E332K1□□H03□	X7R (EIA)	250Vdc	3300pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E472K1□□H03□	X7R (EIA)	250Vdc	4700pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E682K1□□H03□	X7R (EIA)	250Vdc	6800pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E103K1 H03	X7R (EIA)	250Vdc	10000pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E153K1 H03	X7R (EIA)	250Vdc	15000pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E223K1 H03	X7R (EIA)	250Vdc	22000pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E333K2 H03	X7R (EIA)	250Vdc	33000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72E473K2 H03	X7R (EIA)	250Vdc	47000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72E683K2 H03	X7R (EIA)	250Vdc	68000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72E104K2 H03	X7R (EIA)	250Vdc 250Vdc	0.10µF±10%	5.5×4.0	3.15 4.0	5.0	K1	M1 M1
RCER72E154K3 H03 RCER72E224K3 H03	X7R (EIA) X7R (EIA)	250Vdc	0.15μF±10% 0.22μF±10%	5.5×5.0 5.5×5.0	4.0	5.0	K1 K1	M1
RCER72E334K4   H03	X7R (EIA)	250Vdc	0.22μr±10% 0.33μF±10%	7.5×5.5	4.0	5.0	K1	M1
RCER72E474K4   H03	X7R (EIA)	250Vdc	0.47μF±10%	7.5×5.5	4.0	5.0	K1	M1
RCER72E684K5 - H03	X7R (EIA)	250Vdc	0.47μ1±10% 0.68μF±10%	7.5×7.5	4.0	5.0	B1	E1
RCER72E105K5 H03	X7R (EIA)	250Vdc	1.0µF±10%	7.5×7.5	4.0	5.0	B1	E1
RCER72E225MU H03	X7R (EIA)	250Vdc	2.2µF±20%	7.5×12.5	4.0	5.0	B1	E1
RCER72J102K2 H03	X7R (EIA)	630Vdc	1000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J152K2 H03	X7R (EIA)	630Vdc	1500pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J222K2□□H03□	X7R (EIA)	630Vdc	2200pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J332K2□□H03□	X7R (EIA)	630Vdc	3300pF±10%	5.5×4.0	3.15	5.0	K1	M1
		1			1	1	1	<del></del>

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCER72J472K2□□H03□	X7R (EIA)	630Vdc	4700pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J682K2□□H03□	X7R (EIA)	630Vdc	6800pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J103K2□□H03□	X7R (EIA)	630Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J153K2□□H03□	X7R (EIA)	630Vdc	15000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J223K2□□H03□	X7R (EIA)	630Vdc	22000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J333K3□□H03□	X7R (EIA)	630Vdc	33000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER72J473K3□□H03□	X7R (EIA)	630Vdc	47000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER72J683K4□□H03□	X7R (EIA)	630Vdc	68000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RCER72J104K4□□H03□	X7R (EIA)	630Vdc	0.10µF±10%	7.5×5.5	4.0	5.0	K1	M1
RCER72J154K5□□H03□	X7R (EIA)	630Vdc	0.15µF±10%	7.5×8.0	4.0	5.0	B1	E1
RCER72J224K5□□H03□	X7R (EIA)	630Vdc	0.22µF±10%	7.5×8.0	4.0	5.0	B1	E1
RCER72J474MU□□H03□	X7R (EIA)	630Vdc	0.47µF±20%	7.7×13.0	4.0	5.0	B1	E1
RCER73A102K2□□H03□	X7R (EIA)	1000Vdc	1000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A152K2□□H03□	X7R (EIA)	1000Vdc	1500pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A222K2□□H03□	X7R (EIA)	1000Vdc	2200pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A332K2□□H03□	X7R (EIA)	1000Vdc	3300pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A472K2□□H03□	X7R (EIA)	1000Vdc	4700pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A682K2□□H03□	X7R (EIA)	1000Vdc	6800pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A103K2□□H03□	X7R (EIA)	1000Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A153K3□□H03□	X7R (EIA)	1000Vdc	15000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER73A223K3□□H03□	X7R (EIA)	1000Vdc	22000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER73A333K4□□H03□	X7R (EIA)	1000Vdc	33000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RCER73A473K4□□H03□	X7R (EIA)	1000Vdc	47000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RCER73A683K5□□H03□	X7R (EIA)	1000Vdc	68000pF±10%	7.5×8.0	4.0	5.0	B1	E1
RCER73A104K5□□H03□	X7R (EIA)	1000Vdc	0.10µF±10%	7.5×8.0	4.0	5.0	B1	E1
RCER73A224MU□□H03□	X7R (EIA)	1000Vdc	0.22µF±20%	7.7×13.0	4.0	5.0	B1	E1

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code. The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

No.	AEC-Q200	Test Item	Specifications	AEC-Q200	Test Method
1	Pre-and P	ost-Stress Test		-	
	High Tem	perature (Storage)	The measured and observed characteristics should satisfy the specifications in the following table.		
		Appearance	No defects or abnormalities	-	
		Capacitance Change	Within ±3% or ±0.3pF (Whichever is larger)	-	
2		Q	30pF ≤ C: Q ≥ 350 10pF ≤ C < 30pF: Q ≥ 275+5C/2 10pF > C: Q ≥ 200+10C	Sit the capacitor for 1,000±12h 24±2hrs. at *room condition, th	
		I.D.	C: Nominal Capacitance (pF)	_	
		I.R.	More than 1,000MΩ or 50MΩ • μF (Whichever is smaller)		
	Temperat Cycling	cure	The measured and observed characteristics should satisfy the specifications in the following table.	-	
		Appearance	No defects or abnormalities		ding to the four heat treatments
_		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	listed in the following table. Let condition, then measure.	sit for 24±2hrs. at *room
3		Q	30pF ≤ C: Q ≥ 350 10pF ≤ C < 30pF: Q ≥ 275+5C/2 10pF > C: Q ≥ 200+10C	Temp. (°C) -55+0/-3 Room	2 3 4 Temp. 125+3/-0 Room Temp. 1 15±3 1
					1010 1
			C: Nominal Capacitance (pF)	_	
		I.R.	1,000MΩ or 50MΩ • μF min. (Whichever is smaller)		
	Moisture Resistance	:e	The measured and observed characteristics should satisfy the specifications in the following table.	Apply the 24hrs. heat (25 to 65 treatment shown below, 10 cor Let sit for 24±2hrs. at *room co	nsecutive times.
		Appearance	No defects or abnormalities		umidity Humidity Humidity
		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	φ(°C) 90-98% 80-98% 9 70 65 + 1	
4		Q 30pF ≤ C: Q ≥ 200 30pF > C: Q ≥ 100+10C/3		55 50 45 9 40 # 35	
			C: Nominal Capacitance (pF)	9 30 4 4 1000	
		I.R.	500M $\Omega$ or 25M $\Omega$ • μF min. (Whichever is smaller)		cycle = 24 hours 01112131415161718192021222324 Hours
	Biased Hu	ımidity	The measured and observed characteristics should satisfy the specifications in the following table.		
		Appearance	No defects or abnormalities		
5		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Apply the rated voltage and DC at 85±3°C and 80 to 85% humi Remove and let sit for 24±2hrs.	
		Q	30pF ≤ C: Q ≥ 200 30pF > C: Q ≥ 100+10C/3	measure. The charge/discharge current is	,
			C: Nominal Capacitance (pF)		
		I.R.	500M $\Omega$ or 25M $\Omega$ • μF min. (Whichever is smaller)		
	Operation	nal Life	The measured and observed characteristics should satisfy the specifications in the following table.		
		Appearance	No defects or abnormalities	Apply the voltage shown in the 125±3°C.	table for 1,000±12hrs. at
		Capacitance Change	Within ±3% or ±0.3pF (Whichever is larger)	Let sit for 24±2hrs. at *room co The charge/discharge current is	
6	Change		30pF ≤ C: Q ≥ 350 10pF ≤ C < 30pF: Q ≥ 275+5C/2 10pF > C: Q ≥ 200+10C	Rated Voltage DC50V, DC100V DC250V DC630V, DC1kV	Test Voltage 200% of the rated voltage 150% of the rated voltage 120% of the rated voltage
	C: Nominal Capacitance (pF)				
	I.R. 1,000MΩ or 50MΩ • μF min. (Whichever is smaller)				

<sup>\* &</sup>quot;room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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Nα	AEC-Q200	) Test Item	Specifications	AEC-Q200 Test Method
			<u> </u>	
7	External \		No defects or abnormalities	Visual inspection
8	Physical D	Jimension	Within the specified dimensions	Using calipers and micrometers.
9	Marking		To be easily legible.	Visual inspection
		Appearance	No defects or abnormalities	Per MIL-STD-202 Method 215 Solvent 1: 1 part (by volume) of isopropyl alcohol
10	Resistance to Solvents	Q Q	Within the specified tolerance  30pF ≤ C: Q ≥ 1,000  30pF > C: Q ≥ 400+20C	Solvent 1: 1 part (by volume) of mineral spirits  Solvent 2: Terpene defluxer  Solvent 3: 42 parts (by volume) of water  1 part (by volume) of propylene glycol
		I.R.	C: Nominal Capacitance (pF)  More than 10,000MΩ or 500MΩ • μF (Whichever is smaller)	monomethyl ether 1 part (by volume) of monoethanolamine
		Appearance	No defects or abnormalities	
		Capacitance	Within the specified tolerance	Three shocks in each direction should be applied along 3 mutually perpendicular axes of the test specimen (18 shocks
11	Mechanical Shock	Q	30pF ≤ C : Q ≥ 1,000 30pF > C : Q ≥ 400+20C C : Nominal Capacitance (pF)	The specified test pulse should be Half-sine and should have a duration: 0.5ms, peak value: 1,500G and velocity change 4.7m/s.
		Appearance No defects or abnormalities		The capacitor should be subjected to a simple harmonic motion
		Capacitance	Within the specified tolerance	having a total amplitude of 1.5mm, the frequency being varied uniformly between the approximate limits of 10 and 2,000Hz.
12	Vibration	Q	30pF ≤ C: Q ≥ 1,000 30pF > C: Q ≥ 400+20C	The frequency range, from 10 to 2,000Hz and return to 10Hz, should be traversed in approximately 20min. This motion should be applied for 12 items in each 3 mutually perpendicula.
			C: Nominal Capacitance (pF)	directions (total of 36 times).
	Resistance Soldering H		The measured and observed characteristics should satisfy the specifications in the following table.	
	(Non-Preheat)		No defects or abnormalities	_
13		Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	The lead wires should be immersed in the melted solder 1.5 to 2.0mm from the root of terminal at 260±5°C for 10±1sec.
1		Dielectric Strength (Between Terminals)	No defects	Post-treatment Capacitor should be stored for 24±2hrs. at*room condition.
	Soldering F	Resistance to The measured and observed characteristics should satisfy the specifications in the following table.		
	(On-Preheat)	Appearance	No defects or abnormalities	First the capacitor should be stored at 120+0/-5°C for 60+0/-
13 ' 2		Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	sec. Then,the lead wires should be immersed in the melted solder 1 to 2.0mm from the root of terminal at 260±5°C for 7.5+0/-1se
		Dielectric Strength (Between Terminals)	No defects	Post-treatment Capacitor should be stored for 24±2hrs. at*room condition.
	Resistance Soldering H		The measured and observed characteristics should satisfy the specifications in the following table.	Test condition
	(soldering iron method)	Appearance	No defects or abnormalities	Temperature of iron-tip: 350±10°C
13 ' 3		Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Soldering time: 3.5±0.5sec. Soldering position Straight Lead: 1.5 to 2.0mm from the root of terminal.
3		Dielectric Strength (Between Terminals)	No defects	Crimp Lead: 1.5 to 2.0mm from the end of lead bend. Post-treatment Capacitor should be stored for 24±2hrs. at*room condition.
	Thermal Shock  The measured and observed characteristics should satisfy the specifications in the following table.		The measured and observed characteristics should satisfy the specifications in the following table.	
		Appearance	No defects or abnormalities	Perform the 300 cycles according to the two heat treatments
		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	listed in the following table (Maximum transfer time is 20sec.). Let sit for 24±2hrs. at *room condition, then measure.
14	Change		10pF ≤ C < 30p: Q ≥ 275+5C/2	Step         1         2           Temp. (°C)         -55+0/-3         125+3/-0           Time (min.)         15±3         15±3
			C: Nominal Capacitance (pF)	
		I.R.	1,000MΩ or 50MΩ • μF min. (Whichever is smaller)	1

 $<sup>^{\</sup>star}$  "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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No.	AEC-Q200	Test Item	Specifi	cations	AE(	C-Q200 Test Method			
		Appearance Capacitance	No defects or abnormalities  Within the specified tolerance						
15	ESD	Q	30pF ≤ C: Q ≥ 1,000 30pF > C: Q ≥ 400+20C		Per AEC-Q200-002				
			C: Nominal Capacitance (pF)						
		I.R.	More than 10,000M $\Omega$ or 500M $\Omega$	Ω • μF (Whichever is smaller)					
16	Solderabi	lity	Lead wire should be soldered wi direction over 95% of the circur	<u> </u>	The terminal of capacit (JIS K 8101) and rosin propotion). Immerse in	steam aging for 8hrs.±15min. tor is dipped into a solution of ethanol (JIS K 5902) (25% rosin in weight a solder solution for 2±0.5 sec. h of dipping is up to about 1.5 to 2mm y.			
		Appearance	No defects or abnormalities		Visual inspection.				
		Capacitance	Within the specified tolerance $30pF \le C: Q \ge 1,000$		The capacitance, Q sho frequency and voltage	ould be measured at 25°C at the shown in the table.			
		Q	30pF > C: Q ≧ 400+20C		Nominal Cap. C ≦ 1000pF	Frequency Voltage 1±0.1MHz AC0.5 to 5V (r.m.s.)			
			C: Nominal Capacitance (pF)		C > 1000pF	1±0.1kHz AC1±0.2V (r.m.s.)			
		I.R.	Between Terminals	10,000MΩ or 500MΩ • μF min. (Whichever is smaller)					
17	Electrical Charac- terization	Dielectric	Between Terminals	No defects or abnormalities	·				
		Strength			diameter so that each approximately 2mm from	rrent ≦ 50mA.) ge Test Voltage			
18	Terminal Strength	Tensile Strength	Termination not to be broken or	r loosened	gradually to each lead	capacitor body, apply the force in the radial direction of the capacitor d then keep the force applied for			
		Bending Strength	Termination not to be broken or	r loosened	Each lead wire should be subjected to a force of 2.5N and then be bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3 sec.				

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No.	AEC-Q200 Test Item		Specifications		AEC-Q200 Test Method			
					The capacitance change should be measured after 5min. at each specified temperature step.			
					Step 1	Temperature (°C) 25±2		
	2					-55±3		
	Capacitance	Char.	Temperature Coefficient		3	25±2		
		COG	25 to 125°C: 0±30ppm/°C		4	125±3		
19	·		-55 to 25°C: 0+30/-72ppm/°C		5	25±2		
	Characteristics	U2J	25 to 125°C: -750±120ppm/°C -55 to 25°C: -750+120/-347ppm/°C		•	as a reference. When cycling from step 1 through 5 (-55°C to d be within the specified coefficient. ated by dividing the differences inimum measured values in the		

No.	AEC-Q200	Test Item	Specifications	AEC-Q200 Test Method		
1	Pre-and P Electrical	ost-Stress Test		-		
	High Tem Exposure	perature (Storage)	The measured and observed characteristics should satisfy the specifications in the following table.			
		Appearance	No defects or abnormalities	Sit the capacitor for 1,000±12hrs. at 150±3°C. Let sit for		
2		Capacitance Change	Within ±12.5%	<ul> <li>24±2hrs. at *room condition, then measure.</li> <li>Pretreatment</li> <li>Perform the heat treatment at 150+0/-10°C for 60±5min</li> </ul>		
		D.F.	0.04 max.	and then let sit for 24±2hrs. at *room condition.		
		I.R.	More than 1,000M $\Omega$ or 50M $\Omega$ • $\mu F$ (Whichever is smaller)			
	Temperat Cycling	ture	The measured and observed characteristics should satisfy the specifications in the following table.	Perform the 1,000 cycles according to the four heat treatments listed in the following table. Let sit for 24±2hrs. at *room		
		Appearance	No defects or abnormalities	condition, then measure.		
3		Capacitance Change	Within ±12.5%	Step         1         2         3         4           Temp. (°C)         -55+0/-3         Room Temp.         125+3/-0         Room Temp.           Time (min.)         15±3         1         15±3         1		
		D.F.	0.05 max.	•Pretreatment		
		I.R.	1,000Μ $\Omega$ or 50Μ $\Omega$ • $\mu$ F min. (Whichever is smaller)	Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2hrs. at *room condition.		
	Moisture Resistance		The measured and observed characteristics should satisfy the specifications in the following table.	Apply the 24hrs. heat (25 to 65°C) and humidity (80 to 98%) treatment shown below, 10 consecutive times.		
		Appearance	No defects or abnormalities	Let sit for 24±2hrs. at *room condition, then measure.  •Pretreatment		
		Capacitance Change	Within ±12.5%	Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2hrs. at *room condition.		
		D.F.	0.05 max.	Humidity Humidity Humidity Humidity Humidity $\omega^{(°C)}$ 90-98% 80-98% 90-98% 80-98% 90-98%		
4		I.R.	500MΩ or 25MΩ • μF min. (Whichever is smaller)	70 65 60 45 45 45 40 30 30 30 20 15 10 10 10 10 10 10 10 10 10 10 10 10 10		
	Biased Hu	ımidity	The measured and observed characteristics should satisfy the specifications in the following table.	Apply the rated voltage and DC1.3+0.2/-0V (add 100kΩ resistor)		
		Appearance	No defects or abnormalities	at 85±3°C and 80 to 85% humidity for 1,000±12hrs.  Remove and let sit for 24±2hrs. at *room condition, then measure		
5		Capacitance Change	Within ±12.5%	The charge/discharge current is less than 50mA.  •Pretreatment		
		D.F.	0.05 max.	Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2hrs. at *room condition.		
		I.R.	500M $\Omega$ or 25M $\Omega$ • μF min. (Whichever is smaller)			
4. //				Property OC to 10Cl/De		

<sup>\* &</sup>quot;room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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No.	AEC-Q200	Test Item	Specifications	AEC-Q200	Test Method		
	Operation	al Life	The measured and observed characteristics should satisfy the specifications in the following table.	Let sit for 24±2hrs. at *room co			
		Appearance	No defects or abnormalities	The charge/discharge current •Pretreatment	s less than 50mA.		
6		Capacitance Change	Within ±12.5%	Apply test voltage for 60±5m Remove and let sit for 24±2h			
		D.F.	0.04 max.	Rated Voltage Test Voltage			
		I.R.	1,000Μ $\Omega$ or 50Μ $\Omega$ • $\mu$ F min. (Whichever is smaller)	DC25V, DC50V, DC100V DC250V DC630V DC1kV	200% of the rated voltage *1 150% of the rated voltage 120% of the rated voltage 110% of the rated voltage		
7	External \	/isual	No defects or abnormalities	Visual inspection			
8	Physical D	Dimension	Within the specified dimensions	Using calipers and micrometer	S.		
9	Marking		To be easily legible.	Visual inspection			
		Appearance	No defects or abnormalities	Per MIL-STD-202 Method 215			
		Capacitance	Within the specified tolerance	Solvent 1: 1 part (by volume)			
	Resistance	D.F.	0.025 max.	3 parts (by volume Solvent 2: Terpene defluxer	e) of mineral spirits		
10	to Solvents	I.R.	More than 10,000M $\Omega$ or 500M $\Omega$ • $\mu$ F (Whichever is smaller)	Solvent 2: Terpene delitixer  Solvent 3: 42 parts (by volume) of water  1 part (by volume) of propylene glycol  monomethyl ether  1 part (by volume) of monoethanolamine			
		Appearance	No defects or abnormalities	Three shocks in each direction			
11	Mechanical	Capacitance	Within the specified tolerance	3 mutually perpendicular axes The specified test pulse should	of the test specimen (18 shocks).		
11	Shock	D.F.	0.025 max.	·	alue: 1,500G and velocity change:		
		Appearance	No defects or abnormalities	The capacitor should be subjected to a simple harmonic motion having a total amplitude of 1.5mm, the frequency being varied uniformly between the approximate limits of 10 and 2,000Hz.			
		Capacitance	Within the specified tolerance				
12	Vibration	D.F.	0.025 max.	The frequency range, from 10 to 2,000Hz and return to 10Hz, should be traversed in approximately 20min. This motion should be applied for 12 items in each 3 mutually perpendicular directions (total of 36 times).			
	Resistance Soldering H		The measured and observed characteristics should satisfy the specifications in the following table.	The lead wires should be immersed in the melted solder 1.5 to			
	(Non-Preheat)	Appearance	No defects or abnormalities	2.0mm from the root of termin			
13		Capacitance Change	Within ±7.5%		: 150+0/-10°C for 1hr., then place 2hrs. befor initial measurement.		
1		Dielectric Strength (Between Terminals)	No defects	Post-treatment Capacitor should be stored for			
	Resistance Soldering H		The measured and observed characteristics should satisfy the specifications in the following table.	First the capacitor should be st	cored at 120+0/-5°C for 60+0/-5		
	(On-Preheat)	Appearance	No defects or abnormalities	-	immersed in the melted solder		
13		Capacitance Change	Within ±7.5%	1.5 to 2.0mm from the root of terminal at 260±5°C for 7.5+0/-1sec.  Pre-treatment  Capacitor should be stored at 150+0/-10°C for 1hr., then place at room temperature for 24±2hrs. befor initial measurement.  Post-treatment  Capacitor should be stored for 24±2hrs. at* room condition.			
2		Dielectric Strength (Between Terminals)	No defects				

 $<sup>^{*}</sup>$  "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

<sup>\*1:</sup> below parts are applicable in rated voltage  $\times 150\%$ .

Char.	Rated Voltage	Capacitance	Dimensions
C7	1H	105	1
C7	1H	475	2
C7	1H	106	3
C7	1H	226	W
R7	2A	334	1
R7	2A	474-105	2
C7	2A	155-225	3
C7	2A	475	W

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No	. AEC-Q200	Test Item		Specifications	AEC-Q2	00 Test Method		
	Resistance Soldering H		The measured and obspecifications in the f	served characteristics should satisfy the ollowing table.	Test condition Temperature of iron-tip: 35	0±10°C		
	(Soldering Iron Method)	Appearance	No defects or abnorm	nalities	Soldering time: 3.5±0.5sec. Soldering position			
13		Capacitance Change	Within ±7.5%		Straight Lead: 1.5 to 2.0mm from the root of terminal. Crimp Lead: 1.5 to 2.0mm from the end of lead bend.			
3		Dielectric Strength (Between Terminals)	No defects		at room temperature for 24 Post-treatment	at 150+0/-10°C for 1hr., then place 4±2hrs. before initial measurement. for 24±2hrs. at* room condition.		
	Thermal S	Shock	The measured and obspecifications in the f	served characteristics should satisfy the ollowing table.	listed in the following table	ording to the two heat treatments (Maximum transfer time is 20sec.).		
		Appearance	No defects or abnorm	nalities	Let sit for 24±2hrs. at *roon	n condition, then measure.		
14		Capacitance Change	Within ±12.5%		Step 1 Temp. (°C) -55+0 Time (min.) 15±			
		D.F.	0.05 max.		•Pretreatment	3   13±3		
		I.R.	1,000MΩ or 50MΩ • μ	uF min. (Whichever is smaller)		nt at 150+0/-10°C for 60±5min s. at *room condition.		
		Appearance	No defects or abnorm	nalities				
		Capacitance	Within the specified t	olerance				
15	FCD	D.F.	0.025 max.		D 450 0000 000			
15	ESD	I.R.	Rated Voltage: DC25	V, DC50V, DC100V Ω or 500MΩ • μF (Whichever is smaller) 0V, DC500V, DC630V, DC1kV Ω or 100MΩ • μF (Whichever is smaller)	Per AEC-Q200-002			
16	Solderabi	lity		oldered with uniform coating on the axial fthe circumferential direction.	Should be placed into steam aging for 8hrs.±15min.  The terminal of capacitor is dipped into a solution of ethanol (JIS K 8101) and rosin (JIS K 5902) (25% rosin in weight propotion). Immerse in solder solution for 2±0.5 sec.  In both cases the depth of dipping is up to about 1.5 to 2mm from the terminal body.			
		Appearance	No defects or abnorm	nalities	Visual inspection.			
		Capacitance	Within the specified t	olerance		d be measured at 25°C at the		
		D.F.	0.025 max.		frequency and voltage shown in the table.  Frequency  1±0.1kHz  1±0.2V (r.m.s.)			
		I.R.	Retween Terminals	Rated Voltage: DC25V, DC50V, DC100V More than 10,000MΩ or 500MΩ • μF (Whichever is smaller)	The insulation resistance sh voltage shown in the table a of charging.			
			Rated Voltage: DC250V, DC500V, DC630V, DC1kV More than 10,000MΩ or 100MΩ • μF (Whichever is smaller)		Rated Voltag DC25V, DC50V, DC100V, DC630V, DC1kV	DC250V Rated Voltage DC500V		
17	Electrical Charac- terization	Dielectric	Between Terminals	No defects or abnormalities	The capacitor should not be shown in the table is applied for 1 to 5 sec. (Charge/Discharge current:  Rated Voltage DC25V, DC50V, DC100V DC250V DC630V DC1kV	between the terminations ≤ 50mA.) Test Voltage		
		Dielectric Strength	Body Insulation	No defects or abnormalities	diameter so that each termi approximately 2mm from th	ne balls, and 250% of the rated DC is impressed for 1 to 5 sec. between tal balls.  50mA.)  Test Voltage		

 $<sup>^*\ \</sup>hbox{``room condition''}\ \ \ \text{Temperature: 15 to 35°C, Relative humidity: 45 to 75\%, Atmosphere pressure: 86 to 106 kPa}$ 

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Continued from the preceding page.

No.	8 Terminal Strength Strength		Specifications	AEC-Q200 Test Method		
18		Tensile Strength	Termination not to be broken or loosened	As in the figure, fix the capacitor body, apply the force gradually to each lead in the radial direction of the capacitor until reaching 10N and then keep the force applied for 10±1 sec.		
		Bending Strength	Termination not to be broken or loosened	Each lead wire should be subjected to a force of 2.5N and then be bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3 sec.		
				The capacitance change should be each specified temperature step.	measured after 5min. at	
				Step	Temperature (°C)	
				1	25±2	
				2	-55±3	
				3	25±2	
	Capacitar		Char. X7R: Within ±15%	4	125±3	
19			Char. X7S: Within ±22%	5	25±2	
	Characteristics			The ranges of capacitance change compared with the above 25°C value over the temperature ranges shown in the table should be within the specified ranges.  •Pretreatment Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2hrs. at *room condition. Perform the initial measurement.		

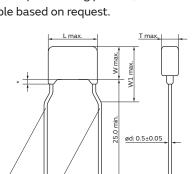
 $<sup>^{*}</sup>$  "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

# Radial Lead Type Monolithic Ceramic Capacitors

## ■ RHE Series 150°C max. (for Automotive) (DC25V-DC100V)

#### **Features**

- 1. Small size and large capacitance
- 2. Low ESR and ESL suitable for high frequency
- 3. Applied maximum temperature up to 150°C Note: Maximum accumulative time to 150°C is within 2000 hours.
- 4. Meet AEC-Q200, ISO7637-2 (surge test) requirement
- 5. Meet LF (Lead Free) and HF (Halogen Free)
- 6. Flow soldering and welding are available. (Re-flow soldering is not available.)
- 7. If copper wire is necessary at welding process, copper wire is available based on request.



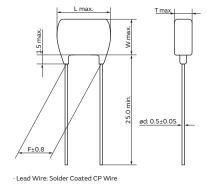


- Coating extension does not exceed the end of the lead bend. Lead Wire: Solder Coated CP Wire



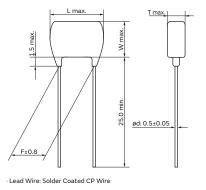
Dimensions code: 0

Lead style code: A2

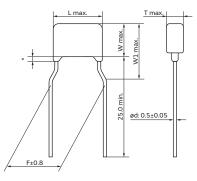


(in mm)



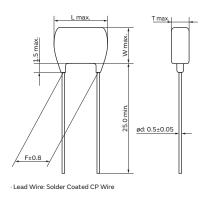




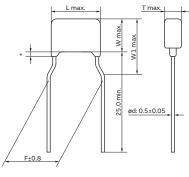


- \* Coating extension does not exceed the end of the lead bend · Lead Wire: Solder Coated CP Wire
  - (in mm)

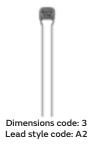


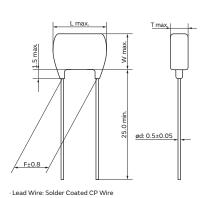




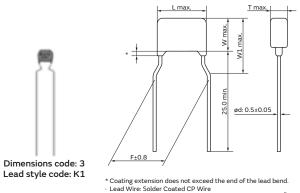


- \* Coating extension does not exceed the end of the lead bend Lead Wire: Solder Coated CP Wire

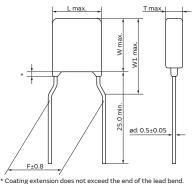




Continued on the following page.







Coating extension does not exceed the end of the lead bend. Lead Wire: Solder Coated CP Wire (in mm)

### **Dimensions**

Dimensions and		Dimensions (mm)								
Lead Style Code	L	w	W1	Т	F	d				
0A2/0DB	3.6	3.5	-		2.5	0.5				
0K1/0M1	3.6	3.5	6.0		5.0	0.5				
1A2/1DB	4.0	3.5	-		2.5	0.5				
1K1/1M1	4.0	3.5	5.0		5.0	0.5				
2A2/2DB	5.5	4.0	-	See the individual product specification	2.5	0.5				
2K1/2M1	5.5	4.0	6.0	product specification	5.0	0.5				
3A2/3DB	5.5	5.0	-		2.5	0.5				
3K1/3M1	5.5	5.0	7.5		5.0	0.5				
WK1/WM1	5.5	7.5	10.0		5.0	0.5				

#### Marking

riai kilig							
Туре	Temperature Compensating Type	High Dielectric	Constant Type				
Rated Voltage	DC50V, DC100V	DC25V, DC50V	DC100V				
Dimensions Code Temp. Char.	X8G	X	3L				
0	8 102J	8 104K	( 8 103K )				
1	(1025)	15-11	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				
2	_	(P 105 K58	© 224 K18				
3, W	_	(№ 335 K58	_				
Temperature Characteristics	Marked with code (X8G, X8L cha	r.: 8)					
Nominal Capacitance	Marked with 3 figures	Marked with 3 figures					
Capacitance Tolerance	Marked with code						
Rated Voltage	Marked with code (DC25V: 2, DC50V: 5, DC100V: 1) A part is omitted (Please refer to the marking example.)						
Manufacturer's Identification	Marked with M A part is omitted (Please refer to	the marking example.)					

## ■ Temperature Compensating Type, X8G Characteristics

Part Number	Temp.	Rated	Capacitance	Dimensions LxW	Dimension T	Lead Space F	Lead Style Code	Lead Style Code
	Char.	Voltage		(mm)	(mm)	(mm)	Bulk	Taping
RHE5G1H101J0 H03	X8G (Murata)	50Vdc	100pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H101J0 H03	X8G (Murata)	50Vdc	100pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H121J0 H03	X8G (Murata)	50Vdc	120pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H121J0 H03	X8G (Murata)	50Vdc	120pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H151J0 H03	X8G (Murata)	50Vdc	150pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H151J0 H03	X8G (Murata)	50Vdc	150pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H181J0 H03	X8G (Murata)	50Vdc	180pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H181J0 H03	X8G (Murata)	50Vdc	180pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H221J0 H03	X8G (Murata)	50Vdc	220pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H221J0 H03	X8G (Murata)	50Vdc	220pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H271J0 H03	X8G (Murata)	50Vdc	270pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H271J0 H03	X8G (Murata)	50Vdc	270pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H331J0 H03	X8G (Murata)	50Vdc	330pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H331J0 H03	X8G (Murata)	50Vdc	330pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H391J0 H03	X8G (Murata)	50Vdc	390pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H391J0 H03	X8G (Murata)	50Vdc	390pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H471J0 H03	X8G (Murata)	50Vdc	470pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H471J0 H03	X8G (Murata)	50Vdc	470pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H561J0 H03	X8G (Murata)	50Vdc	560pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H561J0 H03	X8G (Murata)	50Vdc	560pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H681J0 H03	X8G (Murata)	50Vdc	680pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H681J0 H03	X8G (Murata)	50Vdc	680pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H821J0 H03	X8G (Murata)	50Vdc	820pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H821J0 H03	X8G (Murata)	50Vdc	820pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H102J0 H03	X8G (Murata)	50Vdc	1000pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H102J0 H03	X8G (Murata)	50Vdc	1000pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H122J0 H03	X8G (Murata)	50Vdc	1200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H122J0 H03	X8G (Murata)	50Vdc	1200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H152J0 H03	X8G (Murata)	50Vdc	1500pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H152J0 H03	X8G (Murata)	50Vdc	1500pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H182J0 H03	X8G (Murata)	50Vdc	1800pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H182J0 H03	X8G (Murata)	50Vdc 50Vdc	1800pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H222J0 H03			2200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H222J0 H03	X8G (Murata)	50Vdc	2200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H272J0 H03	X8G (Murata)	50Vdc	2700pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H272J0 H03	X8G (Murata)	50Vdc	2700pF±5%	3.6×3.5	2.5	5.0	K1	M1 DB
RHE5G1H332J0 H03 RHE5G1H332J0 H03	X8G (Murata)	50Vdc	3300pF±5%	3.6×3.5	2.5	2.5	A2	
RHE5G1H392J0 H03	X8G (Murata)	50Vdc 50Vdc	3300pF±5% 3900pF±5%	3.6×3.5 3.6×3.5	2.5	2.5	K1 A2	M1 DB
RHE5G1H392J0 H03	` ′	50Vdc	3900pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H472J1 H03	` ′	50Vdc	4700pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G1H472J1 H03	X8G (Murata)	50Vdc	4700pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G1H562J1 H03	X8G (Murata)	50Vdc	5600pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G1H562J1 H03	X8G (Murata)	50Vdc	5600pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G1H682J1 H03	X8G (Murata)	50Vdc	6800pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G1H682J1 H03	X8G (Murata)	50Vdc	6800pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G1H822J1 H03	X8G (Murata)	50Vdc	8200pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G1H822J1 H03	, ,	50Vdc	8200pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G1H103J1 H03	X8G (Murata)	50Vdc	10000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G1H103J1 H03	X8G (Murata)	50Vdc	10000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G2A101J0 H03	X8G (Murata)	100Vdc	100pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A101J0 H03	X8G (Murata)	100Vdc	100pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A121J0 H03	X8G (Murata)	100Vdc	120pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A121J0 H03	X8G (Murata)	100Vdc	120pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A151J0 H03	X8G (Murata)	100Vdc	150pF±5%	3.6×3.5	2.5	2.5	A2	DB
	1 (1			2.00.0	2.0	2.0		

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW	Dimension T	Lead Space F	Lead Style Code Bulk	Lead Style Code
RHE5G2A151J0□□H03□	X8G (Murata)	100Vdc	150pF±5%	(mm) 3.6×3.5	(mm) 2.5	(mm) 5.0	K1	Taping M1
RHE5G2A181J0□□H03□	X8G (Murata)	100Vdc	180pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A181J0□□H03□	X8G (Murata)	100Vdc	180pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A221J0□□H03□	X8G (Murata)	100Vdc	220pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A221J0□□H03□	X8G (Murata)	100Vdc	220pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A271J0 H03	X8G (Murata)	100Vdc	270pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A271J0 H03	X8G (Murata)	100Vdc	270pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A331J0□□H03□	X8G (Murata)	100Vdc	330pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A331J0 H03	X8G (Murata)	100Vdc	330pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A391J0 H03	X8G (Murata)	100Vdc	390pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A391J0 H03	X8G (Murata)	100Vdc	390pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A471J0□□H03□	X8G (Murata)	100Vdc	470pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A471J0□□H03□	X8G (Murata)	100Vdc	470pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A561J0□□H03□	X8G (Murata)	100Vdc	560pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A561J0□□H03□	X8G (Murata)	100Vdc	560pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A681J0□□H03□	X8G (Murata)	100Vdc	680pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A681J0□□H03□	X8G (Murata)	100Vdc	680pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A821J0□□H03□	X8G (Murata)	100Vdc	820pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A821J0□□H03□	X8G (Murata)	100Vdc	820pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A102J0□□H03□	X8G (Murata)	100Vdc	1000pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A102J0□□H03□	X8G (Murata)	100Vdc	1000pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A122J0□□H03□	X8G (Murata)	100Vdc	1200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A122J0□□H03□	X8G (Murata)	100Vdc	1200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A152J0□□H03□	X8G (Murata)	100Vdc	1500pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A152J0□□H03□	X8G (Murata)	100Vdc	1500pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A182J1□□H03□	X8G (Murata)	100Vdc	1800pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G2A182J1□□H03□	X8G (Murata)	100Vdc	1800pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G2A222J1□□H03□	X8G (Murata)	100Vdc	2200pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G2A222J1□□H03□	X8G (Murata)	100Vdc	2200pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G2A272J1□□H03□	X8G (Murata)	100Vdc	2700pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G2A272J1□□H03□	X8G (Murata)	100Vdc	2700pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G2A332J1□□H03□	X8G (Murata)	100Vdc	3300pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G2A332J1□□H03□	X8G (Murata)	100Vdc	3300pF±5%	4.0×3.5	2.5	5.0	K1	M1

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code.

## 

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RHEL81E104K0□□H03□	X8L (Murata)	25Vdc	0.1µF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81E104K0 H03	X8L (Murata)	25Vdc	0.1µF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81E154K0 H03	X8L (Murata)	25Vdc	0.15µF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81E154K0 H03	X8L (Murata)	25Vdc	0.15µF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81E224K0 H03	X8L (Murata)	25Vdc	0.22µF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81E224K0 H03	X8L (Murata)	25Vdc	0.22µF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81E334K1 H03	X8L (Murata)	25Vdc	0.33µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL81E334K1 H03	X8L (Murata)	25Vdc	0.33µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL81E474K1 H03	X8L (Murata)	25Vdc	0.47µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL81E474K1 H03	X8L (Murata)	25Vdc	0.47µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL81E684K1 H03	X8L (Murata)	25Vdc	0.68µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL81E684K1 H03	X8L (Murata)	25Vdc	0.68µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL81E105K1 H03	X8L (Murata)	25Vdc	1.0µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL81E105K1 H03	X8L (Murata)	25Vdc	1.0µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL81E155K2 H03	X8L (Murata)	25Vdc	1.5µF±10%	5.5×4.0	3.15	2.5	A2	DB
RHEL81E155K2 H03	X8L (Murata)	25Vdc	1.5µF±10%	5.5×4.0	3.15	5.0	K1	M1
RHEL81E225K2 H03	X8L (Murata)	25Vdc	2.2µF±10%	5.5×4.0	3.15	2.5	A2	DB

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RHEL81E225K2 H03	X8L (Murata)	25Vdc	2.2µF±10%	5.5×4.0	3.15	5.0	K1	M1
RHEL81E335K2□□H03□	X8L (Murata)	25Vdc	3.3µF±10%	5.5×4.0	3.15	2.5	A2	DB
RHEL81E335K2□□H03□	X8L (Murata)	25Vdc	3.3µF±10%	5.5×4.0	3.15	5.0	K1	M1
RHEL81E475K2□□H03□	X8L (Murata)	25Vdc	4.7µF±10%	5.5×4.0	3.15	2.5	A2	DB
RHEL81E475K2□□H03□	X8L (Murata)	25Vdc	4.7µF±10%	5.5×4.0	3.15	5.0	K1	M1
RHEL81E106K3□□H03□	X8L (Murata)	25Vdc	10µF±10%	5.5×5.0	4.0	2.5	A2	DB
RHEL81E106K3   H03	X8L (Murata)	25Vdc	10µF±10%	5.5×5.0	4.0	5.0	K1	M1
RHEL81E226MW H03	X8L (Murata)	25Vdc	22µF±20%	5.5×7.5	4.0	5.0	K1	M1
RHEL81H221K0 H03	X8L (Murata)	50Vdc	220pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81H221K0 H03	X8L (Murata)	50Vdc	220pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H331K0□□H03□	X8L (Murata)	50Vdc	330pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81H331K0□□H03□	X8L (Murata)	50Vdc	330pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H471K0□□H03□	X8L (Murata)	50Vdc	470pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81H471K0 H03	X8L (Murata)	50Vdc	470pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H681K0□□H03□	X8L (Murata)	50Vdc	680pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81H681K0□□H03□	X8L (Murata)	50Vdc	680pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H102K0□□H03□	X8L (Murata)	50Vdc	1000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81H102K0□□H03□	X8L (Murata)	50Vdc	1000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H152K0 H03	X8L (Murata)	50Vdc	1500pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81H152K0 H03	X8L (Murata)	50Vdc	1500pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H222K0 H03	X8L (Murata)	50Vdc	2200pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81H222K0 H03	X8L (Murata)	50Vdc	2200pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H332K0 H03	X8L (Murata)	50Vdc	3300pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81H332K0 H03	X8L (Murata)	50Vdc	3300pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H472K0 H03	X8L (Murata)	50Vdc	4700pF±10%	3.6×3.5	2.5	2.5	A2	DB M1
RHEL81H472K0□□H03□ RHEL81H682K0□□H03□	X8L (Murata)	50Vdc 50Vdc	4700pF±10% 6800pF±10%	3.6×3.5 3.6×3.5	2.5	5.0 2.5	K1 A2	M1 DB
RHEL81H682K0 H03	X8L (Murata)	50Vdc	6800pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H103K0 H03	X8L (Murata)	50Vdc	10000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81H103K0 H03	X8L (Murata)	50Vdc	10000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H153K0 H03	X8L (Murata)	50Vdc	15000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81H153K0 H03	X8L (Murata)	50Vdc	15000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H223K0□□H03□	X8L (Murata)	50Vdc	22000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81H223K0□□H03□	X8L (Murata)	50Vdc	22000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H333K0□□H03□	X8L (Murata)	50Vdc	33000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81H333K0□□H03□	X8L (Murata)	50Vdc	33000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H473K0 H03	X8L (Murata)	50Vdc	47000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81H473K0 H03	X8L (Murata)	50Vdc	47000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H683K0□□H03□	X8L (Murata)	50Vdc	68000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81H683K0□□H03□	X8L (Murata)	50Vdc	68000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H104K0□□H03□	X8L (Murata)	50Vdc	0.10µF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81H104K0   H03	X8L (Murata)	50Vdc	0.10µF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81H154K1 H03	X8L (Murata)	50Vdc	0.15µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL81H154K1 H03	X8L (Murata)	50Vdc	0.15µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL81H224K1 H03	X8L (Murata)	50Vdc	0.22µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL81H224K1 H03	X8L (Murata)	50Vdc	0.22µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL81H334K1 H03	X8L (Murata)	50Vdc	0.33µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL81H334K1 H03	X8L (Murata)	50Vdc	0.33µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL81H474K2 H03	X8L (Murata)	50Vdc	0.47µF±10%	5.5×4.0	3.15	2.5	A2	DB M1
RHEL81H474K2 H03	X8L (Murata)	50Vdc	0.47µF±10%	5.5×4.0	3.15	5.0	K1	M1
RHEL81H684K2 H03	X8L (Murata)	50Vdc	0.68µF±10%	5.5×4.0	3.15	2.5	A2	DB M1
RHEL81H684K2   H03   RHEL81H105K2   H03	X8L (Murata)	50Vdc 50Vdc	0.68µF±10%	5.5×4.0 5.5×4.0	3.15	5.0 2.5	K1 A2	M1 DB
RHEL81H105K2 H03	X8L (Murata) X8L (Murata)	50Vdc	1.0μF±10% 1.0μF±10%	5.5×4.0	3.15	5.0	K1	M1
RHEL81H155K2 H03	X8L (Murata)	50Vdc	1.5μF±10%	5.5×4.0	3.15	2.5	A2	DB
RHEL81H155K2 H03	X8L (Murata)	50Vdc	1.5μF±10%	5.5×4.0	3.15	5.0	K1	M1
RHEL81H225K2   H03	X8L (Murata)	50Vdc	2.2µF±10%	5.5×4.0	3.15	2.5	A2	DB
	/ (1 Idiata)	35 vac	2.2μι ±10 /0	3.3.7.0	3.13	2.5		

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Continued from the preceding pa		Rated		Dimensions	Dimension	Lead Space	Lead Style	Lead Style
Part Number	Part Number Temp. Char.		Capacitance	LxW (mm)	T (mm)	F (mm)	Code Bulk	Code Taping
RHEL81H225K2 H03	X8L (Murata)	50Vdc	2.2µF±10%	5.5×4.0	3.15	5.0	K1	M1
RHEL81H335K3 H03	X8L (Murata)	50Vdc	3.3µF±10%	5.5×5.0	4.0	2.5	A2	DB
RHEL81H335K3□□H03□	X8L (Murata)	50Vdc	3.3µF±10%	5.5×5.0	4.0	5.0	K1	M1
RHEL81H475K3 H03	X8L (Murata)	50Vdc	4.7µF±10%	5.5×5.0	4.0	2.5	A2	DB
RHEL81H475K3□□H03□	X8L (Murata)	50Vdc	4.7µF±10%	5.5×5.0	4.0	5.0	K1	M1
RHEL81H106MW□□H03□	X8L (Murata)	50Vdc	10μF±20%	5.5×7.5	4.0	5.0	K1	M1
RHEL82A221K0 H03	X8L (Murata)	100Vdc	220pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL82A221K0□□H03□	X8L (Murata)	100Vdc	220pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL82A331K0 H03	X8L (Murata)	100Vdc	330pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL82A331K0□□H03□	X8L (Murata)	100Vdc	330pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL82A471K0 H03	X8L (Murata)	100Vdc	470pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL82A471K0 H03	X8L (Murata)	100Vdc	470pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL82A681K0 H03	X8L (Murata)	100Vdc	680pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL82A681K0□□H03□	X8L (Murata)	100Vdc	680pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL82A102K0□□H03□	X8L (Murata)	100Vdc	1000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL82A102K0□□H03□	X8L (Murata)	100Vdc	1000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL82A152K0□□H03□	X8L (Murata)	100Vdc	1500pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL82A152K0□□H03□	X8L (Murata)	100Vdc	1500pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL82A222K0□□H03□	X8L (Murata)	100Vdc	2200pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL82A222K0□□H03□	X8L (Murata)	100Vdc	2200pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL82A332K0□□H03□	X8L (Murata)	100Vdc	3300pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL82A332K0□□H03□	X8L (Murata)	100Vdc	3300pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL82A472K0□□H03□	X8L (Murata)	100Vdc	4700pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL82A472K0□□H03□	X8L (Murata)	100Vdc	4700pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL82A682K0□□H03□	X8L (Murata)	100Vdc	6800pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL82A682K0□□H03□	X8L (Murata)	100Vdc	6800pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL82A103K0 H03	X8L (Murata)	100Vdc	10000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL82A103K0 H03	X8L (Murata)	100Vdc	10000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL82A153K0 H03	X8L (Murata)	100Vdc	15000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL82A153K0 H03	X8L (Murata)	100Vdc	15000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL82A223K0□□H03□	X8L (Murata)	100Vdc	22000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL82A223K0□□H03□	X8L (Murata)	100Vdc	22000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL82A333K1 H03	X8L (Murata)	100Vdc	33000pF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL82A333K1 H03	X8L (Murata)	100Vdc	33000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL82A473K1 H03	X8L (Murata)	100Vdc	47000pF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL82A473K1 H03	X8L (Murata)	100Vdc	47000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL82A683K1□□H03□	X8L (Murata)	100Vdc	68000pF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL82A683K1 H03	X8L (Murata)	100Vdc	68000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL82A104K1 H03	X8L (Murata)	100Vdc	0.10µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL82A104K1 H03	X8L (Murata)	100Vdc	0.10µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL82A154K2 H03	X8L (Murata)	100Vdc	0.15µF±10%	5.5×4.0	3.15	2.5	A2	DB
RHEL82A154K2 H03	X8L (Murata)	100Vdc	0.15µF±10%	5.5×4.0	3.15	5.0	K1	M1
RHEL82A224K2 H03	X8L (Murata)	100Vdc	0.22µF±10%	5.5×4.0	3.15	2.5	A2	DB
RHEL82A224K2 H03	X8L (Murata)	100Vdc	0.22µF±10%	5.5×4.0	3.15	5.0	K1	M1

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code.

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)  $\,$ 

## Specifications and Test Methods

			Specif	ication			
No.	No. AEC-Q200 Test Item		<u> </u>	High Dielectric Constant Type	AEC-Q200 Test Method		
			(Char. X8G)	(Char. X8L)			
1	Pre-and Post-Stress Electrical Test			-	-		
	High Temperature Exposure (Storage)		The measured and observed cha specifications in the following to	,			
		Appearance	No defects or abnormalities		Sit the capacitor for 1,000±12hrs. at 150±3°C. Let sit for 24±2hrs. at *room condition, then measure.		
2		Capacitance	Within ±3% or ±0.3pF	Within ±12.5%	•Pretreatment		
		Change	(Whichever is larger)	0.04 may	Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2hrs. at *room condition. (for Char. X8L)		
		Q/D.F.	$Q \ge 350$ More than 1,000MΩ or 50MΩ •	0.04 max.	,		
	Temperat		The measured and observed cha	· · · · · · · · · · · · · · · · · · ·	Perform the 1,000 cycles according to the four heat		
	Cycling		specifications in the following to	,	treatments listed in the following table. Let sit for 24±2hrs. at		
		Appearance	No defects or abnormalities exc coating	ept color change of outer	*room condition, then measure.  Step 1 2 3 4		
3		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Within ±12.5%	Temp. (°C)         -55+0/-3         Room Temp.         150+3/-0         Room Temp.           Time (min.)         15±3         1         15±3         1		
		Q/D.F.	Q ≧ 350	0.05 max.	Pretreatment  Perform the heat treatment at 150+0/-10°C for 60±5min and		
		I.R.	1,000MΩ or 50MΩ • μF min. (W	hichever is smaller)	then let sit for 24±2hrs. at *room condition. (for Char. X8L)		
	Moisture Resistanc	e	The measured and observed characteristics should satisfy the specifications in the following table.		Apply the 24hrs. heat (25 to 65°C) and humidity (80 to 98%) treatment shown below, 10 consecutive times.		
		Appearance	No defects or abnormalities		Let sit for 24±2hrs. at *room condition, then measure.  •Pretreatment		
		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Within ±12.5%	Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2hrs. at *room condition. (for Char. X8L)		
		Q/D.F.	Q ≧ 200	0.05 max.	Humidity Humidity Humidity Humidity  ∞(°C) 90-98% 80-98% 90-98% 80-98% 90-98%		
4		I.R.	500MΩ or 25MΩ • μF min. (Whic	chever is smaller)	65 66 67 87 87 87 87 87 87 87 87 87 8		
	Biased Humidity		The measured and observed characteristics should satisfy the specifications in the following table.		Apply the rated voltage and DC1.3+0.2/-0V (add $100k\Omega$ resistent 85±3°C and 80 to 85% humidity for 1,000±12hrs.		
		Appearance	No defects or abnormalities		Remove and let sit for 24±2hrs. at *room condition, then measure. The charge/discharge current is less than 50mA.		
5		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Within ±12.5%	Pretreatment		
		Q/D.F.	Q ≧ 200	0.05 max.	Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2hrs. at *room condition. (for Char. X8L)		
		I.R.	500MΩ or 25MΩ • μF min. (Whice	· · · · · · · · · · · · · · · · · · ·	unenter siciol 24:21iis. ac 100111 COlidicion. (101 Chai. XSL)		
	Operational Life		The measured and observed characteristics should satisfy the specifications in the following table.		Apply 150% of the rated voltage for 1,000±12hrs. at 150±3°C		
		Appearance	No defects or abnormalities except color change of outer coating		Let sit for 24±2hrs. at *room condition, then measure. The charge/discharge current is less than 50mA.		
6		Capacitance Change	Within ±3% or ±0.3pF (Whichever is larger)	Within ±12.5%	•Pretreatment Apply test voltage for 60±5 min at test temperature.		
		Q/D.F.	Q ≧ 350	0.04 max.	Remove and let sit for 24±2hrs. at *room condition. (for Char. X8L)		
		I.R.	1,000MΩ or 50MΩ • μF min. (W	hichever is smaller)			
7	External \	/isual	No defects or abnormalities		Visual inspection		
8	-	Dimension	Within the specified dimensions	; 	Using calipers and micrometers.		
9	Marking		To be easily legible.		Visual inspection		

 $<sup>\</sup>hbox{$^*$ "room condition"} \quad \hbox{Temperature: 15 to 35°C, Relative humidity: 45 to 75\%, Atmosphere pressure: 86 to 106 kPa}$ 

Continued on the following page.  ${\cal J}$ 

## Specifications and Test Methods

Continued from the preceding page.

			· · · · · · · · · · · · · · · · · · ·	ication				
۱о.	o. AEC-Q200 Test Item		Temperature Compensating Type (Char. X8G)	High Dielectric Constant Type (Char. X8L)	AEC-Q200 Test Method			
10		Appearance	No defects or abnormalities		Per MIL-STD-202 Method 215			
		Capacitance	Within the specified tolerance		Solvent 1: 1 part (by volume) of isopropyl alcohol 3 parts (by volume) of mineral spirits			
	Resistance	Q/D.F.	Q ≧ 1,000	0.025 max.	Solvent 2: Terpene defluxer			
	to Solvents	I.R.	More than 10,000MΩ or 500MΩ	Ω • μF (Whichever is smaller)	Solvent 3: 42 parts (by volume) of water 1 part (by volume) of propylene glycol monomethyl ether 1 part (by volume) of monoethanolamine			
11		Appearance	No defects or abnormalities		Three shocks in each direction should be applied along 3			
	Mechanical	Capacitance	Within the specified tolerance		mutually perpendicular axes of the test specimen (18 shocks).  The specified test pulse should be Half-sine and should			
	Shock	Q/D.F.	Q ≧ 1,000	0.025 max.	have a duration: 0.5ms, peak value: 1,500G and velocity change: 4.7m/s.			
		Appearance	No defects or abnormalities		The capacitor should be subjected to a simple harmonic motion			
		Capacitance	Within the specified tolerance		having a total amplitude of 1.5mm, the frequency being varied uniformly between the approximate limits of 10 and 2,000Hz.			
12	Vibration	Q/D.F.	Q ≥ 1,000	0.025 max.	The frequency range, from 10 to 2,000Hz and return to 10Hz, should be traversed in approximately 20min. This motion should be applied for 12 items in each 3 mutually perpendicular directions (total of 36 times).			
13 ' 1	Resistance Soldering F	leat	The measured and observed chaspecifications in the following to	,	The lead wires should be immersed in the melted solder 1.5 to			
	(Non-Preheat)	Appearance	No defects or abnormalities		2.0mm from the root of terminal at 260±5°C for 10±1sec.  Pre-treatment			
		Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Within ±7.5%	Capacitor should be stored at 150+0/-10°C for 1hr., then place at room temperature for 24±2hrs. before initial measurement.			
		Dielectric Strength (Between Terminals)	No defects		(For Char. X8L) Post-treatment Capacitor should be stored for 24±2hrs. at*room condition.			
	Resistance to Soldering Heat		The measured and observed chaspecifications in the following to	,	First the capacitor should be stored at 120+0/-5°C for 60+0/-5 sec.  Then, the lead wires should be immersed in the melted solder  1.5 to 2.0mm from the root of terminal at 260±5°C for			
	(On-Preheat)	Appearance	No defects or abnormalities					
2		Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Within ±7.5%	7.5+0/-1sec. Pre-treatment			
_	Dielectric Strength (Between Terminals)		No defects		Capacitor should be stored at 150+0/-10°C for 1hr., then place at room temperature for 24±2hrs. before initial measurement (For Char. X8L)  Post-treatment  Capacitor should be stored for 24±2hrs. at*room condition.			
	Resistance to Soldering Heat		The measured and observed characteristics should satisfy the specifications in the following table.		Test condition Temperature of iron-tip: 350±10°C Soldering time: 3.5±0.5sec.			
	(Soldering Iron Method)	Appearance	No defects or abnormalities		Soldering position			
.3 ' 3	,	Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Within ±7.5%	Straight Lead: 1.5 to 2.0mm from the root of terminal. Crimp Lead: 1.5 to 2.0mm from the end of lead bend. Pre-treatment			
		Dielectric Strength (Between Terminals)	No defects		Capacitor should be stored at 150+0/-10°C for 1hr., then pl at room temperature for 24±2hrs. before initial measuremer (For Char. X8L)  Post-treatment  Capacitor should be stored for 24±2hrs. at*room condition.			
	Thermal S	Shock	The measured and observed characteristics should satisfy the specifications in the following table.  No defects or abnormalities		Perform the 300 cycles according to the two heat treatments listed in the following table (Maximum transfer time is 20s.).			
		Appearance			Let sit for 24±2hrs. at *room condition, then measure.			
.4		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Within ±12.5%	Step         1         2           Temp. (°C)         -55+0/-3         150+3/-0           Time (min.)         15±3         15±3			
		Q/D.F.	Q ≧ 350	0.05 max.	•Pretreatment			
		I.R.	1,000M $\Omega$ or 50M $\Omega$ • μF min. (Whichever is smaller)		Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2hrs. at *room condition. (for Char. X8L)			
		i.r.						
		Appearance	No defects or abnormalities					
5	FSD				- Per ΔFC-Ω200-002			
15	ESD	Appearance		0.025 max.	Per AEC-Q200-002			

 $<sup>^{\</sup>star}$  "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

## Specifications and Test Methods

Continued from the preceding page.

Con	tinued fron	n the prece	ding page. 🔌							
Specification  No. AEC-Q200 Test Item Temperature Compensating Type High Dielectric Constant Type							AEC-Q200 Test Method			
No.	AEC-Q200	) Test Item		mpensating Type . X8G)	High Dielectric Constant Type (Char. X8L)		AEC-Q200	J I est Method		
16	Solderabi	lity		hould be soldered with uniform coating on the axial ver 95% of the circumferential direction.		The terminal of a capacitor is dipped into a solution of ethanol (JIS-K-8101) and rosin (JIS-K-5902) (25%rosin in weight propotion) and then into molten solder (JIS-Z-3282) for 2±0.5 sec. In both cases the depth of dipping is up to about 1.5 to 2mm from the terminal body.  Temp. of solder: 245±5°C Lead Free Solder (Sn-3.0Ag-0.5Cu)				
							H60A or H63A Eut	ectic Solder		
		Appearance	No defects or a			Visual insp				
		Capacitance	Within the spec	cified tolerance			tance, Q/D.F. shoul and voltage shown	d be measured at 25°C at the in the table.		
		Q/D.F.	Q ≧ 1,000		0.025 max.	Char. Nominal Cap.  X8G C ≦ 1,000pF  X8G C > 1000pF  X8L -		equency Voltage ±0.1MHz AC0.5 to 5V (r.m.s.) ±0.1kHz AC1±0.2V (r.m.s.) ±0.1kHz AC1±0.2V (r.m.s.)		
	Electrical Charac- terization	Insulation Posistance	Room Temperature	10,000MΩ or 5 (Whichever is s	500MΩ • μF min. maller)	DC voltage temperatu	not exceeding the	old be measured at 25±3°C with a rated voltage at normal d within 2min. of charging.		
17		Resistance (I.R.)	High Temperature	100MΩ or 5MΩ (Whichever is s	•	The insulation resistance should be measured at 150±3°C with a DC voltage not exceeding the rated voltage at normal temperature and humidity and within 2min. of charging. (Charge/Discharge current ≤ 50mA.)				
		Dielectric Strength	Between Terminals	No defects or a	ıbnormalities	300% of th				
			Body Insulation	No defects or a	ubnormalities	with metal that each t approxima 250% of th impressed between ca balls.	tor is placed in a co balls of 1mm diam terminal, short-circu tely 2mm from the ne rated DC voltage for 1 to 5 sec. apacitor terminals a ischarge current \( \le 5	eter so uit is kept balls, and is Approx. 2mm		
18	Tensile Strength		Termination not to be broken or loosened			apply the fi in the radia until reach	gure, fix the capacit orce gradually to ea al direction of the ca ing 10N and then ke ed for 10±1 sec.	ach lead apacitor		
	Strength	Bending Strength	Termination no	t to be broken or	loosened	Each lead wire should be subjected to a force of 2.5N and then be bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3 sec.				
19	Capacitance Temperature Characteristics		25 to 0±30	erature Coefficient 150°C: ppm/°C	Within ±15% (Temp. Range: -55 to +125°C) Within +15/-40%		tance change shoul fied temperature st Step 1 2 3 4 5	d be measured after 5min. at ep.  Temperature (°C)  25±2  -55±3  25±2  150±3  25±2		
			0+30	o 25°C: /-72ppm/°C	(Temp. Range: +125 to +150°C)	The temperature coefficient or the ranges of capacitance change is determined using the capacitance measured in step 3 as a reference.  •Pretreatment Perform the heat treatment at 150+0/-10°C for 60±5 min and then let sit for 24±2hrs. at *room condition. Perform the initial measurement. (for Char. X8L)				

<sup>\* &</sup>quot;room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

# Radial Lead Type Monolithic Ceramic Capacitors

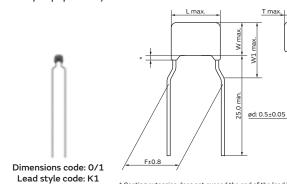
## ■ RDE Series (For General Use Only) (DC25V-DC1kV)

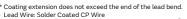
#### **Features**

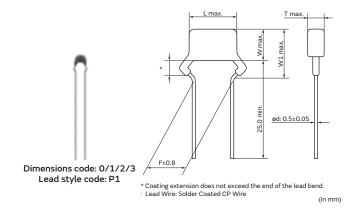
- 1. Small size and large capacitance
- 2. Low ESR characteristics for high frequency
- 3. Meet LF (Lead Free) and HF (Halogen Free)
- 4. Flow soldering is available, but re-flow soldering is not available.

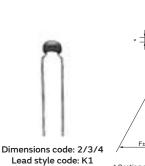
#### **Applications**

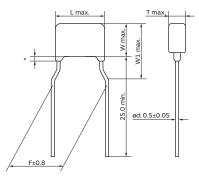
General electronic equipment (Do not use for automotive-related power train and safety equipment.)







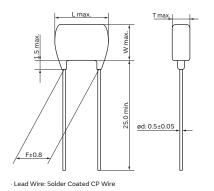




Coating extension does not exceed the end of the lead bend Lead Wire: Solder Coated CP Wire

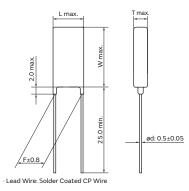


Dimensions code: 5 Lead style code: B1



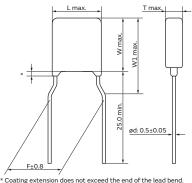
(in mm)





(in mm)

# Dimensions code: W Lead style code: K1



#### **Dimensions**

Dimensions and	Dimensions (mm)						
Lead Style Code	L	W	W1	Т	F	d	
0P1/0S1	5.0	3.5	6.0		2.5	0.5	
0K1/0M1	4.0	3.5	6.0		5.0	0.5	
1P1/1S1	5.0	3.5	5.0		2.5	0.5	
1K1/1M1	4.5	3.5	5.0		5.0	0.5	
2P1/2S1	5.5	4.0	6.0		2.5	0.5	
2K1/2M1	5.5	4.0	6.0	See the individual	5.0	0.5	
3P1/3S1	5.5	5.0	7.5	product specification	2.5	0.5	
3K1/3M1	5.5	5.0	7.5		5.0	0.5	
4K1/4M1	7.5	5.5	8.0		5.0	0.5	
5B1/5E1	7.5	7.5*	-		5.0	0.5	
UB1/UE1	7.7	12.5*	-		5.0	0.5	
WK1/WM1	5.5	7.5	10.0		5.0	0.5	

\*DC630V, DC1kV: W+0.5mm

Lead Wire: Solder Coated CP Wire

# Marking

Maiking												
Rated Voltage	DC2	.5V	D	0C50V			DC100V		DC250V	DC500V	DC630V	DC1kV
Dimensions Char.	X7S	X7R	COG	X7S	X7R	COG	X7S	X7R		X7R, U	2J, C0G	
0		104K		-			-		-		-	-
1	224K	-	A 102J	-	224K	A 102J	-	224K	(U2J) (U2J) (U2R) (X7R)	(X7R)	-	-
2	(H475)	-	563 J5A	(H475)	(M105)	(M103)	-	(M105)	(U2J)  (U2J)  (V3)  (V473)  (X7R)  (X7R)	(X7R)	(U2J) (U2J) (X7R) (332) (372)	(U2J)  (U2J)  (U2J)  (X7R)  (X7R)
3, 4, W	(M226 K2C)	-	-	(M226 K5C)	(M335 K5C)	-	(M225 K1C)	-	(COG)  (E)473  J4U  (U2J)  (E)224  K4C	(X7R)	(COG)  (M103 J7U (U2J)  (W104 K7C	(COG)  (M472  JAU)  (U2J)  (M333  KAC
5, U	-	-	-	-	-	-	-	-	(X7R)  -  (X7A)  (X7R)	(X7R)	(X7R) (M) 333 J7U (U2J) (W) 474 M7C (X7R)	(X7R) (M) 103 JAU (U2J) (W) 104 KAC (X7R)
Temperature Characteristics		,	COG char.: lease refer				U)					
Nominal Capacitance	Under 10	00pF: Actu	al value 1	.00pF and	over: Mark	ed with 3 f	igures					
Capacitance Tolerance		vith code omitted (P	lease refer	to the ma	rking exam	nple.)						
Rated Voltage		Marked with code (DC25V: 2, DC50V: 5, DC100V: 1, DC250V: 4, DC500V: 9, DC630V: 7, DC1kV: A) A part is omitted (Please refer to the marking example.)										
Manufacturer's Identification	Marked v A part is		lease refer	to the ma	rking exam	nple.)						

# **■** Temperature Compensating Type, COG/U2J Characteristics

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE5C1H1R0C0 H03	COG (EIA)	50Vdc	1.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H1R0C0 H03	COG (EIA)	50Vdc	1.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H2R0C0 H03	COG (EIA)	50Vdc	2.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H2R0C0 H03	COG (EIA)	50Vdc	2.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H3R0C0 H03	COG (EIA)	50Vdc	3.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H3R0C0 H03	COG (EIA)	50Vdc	3.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H4R0C0 H03	COG (EIA)	50Vdc	4.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H4R0C0 H03	COG (EIA)	50Vdc	4.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H5R0C0 H03	COG (EIA)	50Vdc	5.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H5R0C0□□H03□	COG (EIA)	50Vdc	5.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE5C1H6R0D0 H03	COG (EIA)	50Vdc	6.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H6R0D0 H03	COG (EIA)	50Vdc	6.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H7R0D0 H03	COG (EIA)	50Vdc	7.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H7R0D0□□H03□	COG (EIA)	50Vdc	7.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H8R0D0□□H03□	COG (EIA)	50Vdc	8.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H8R0D0 H03	COG (EIA)	50Vdc	8.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H9R0D0 H03	COG (EIA)	50Vdc	9.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H9R0D0 H03	COG (EIA)	50Vdc	9.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H100J0 H03	COG (EIA)	50Vdc	10pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H100J0 H03	COG (EIA)	50Vdc	10pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H120J0 H03	COG (EIA)	50Vdc	12pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H120J0 H03	COG (EIA)	50Vdc	12pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H150J0 H03	COG (EIA)	50Vdc	15pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H150J0 H03	COG (EIA)	50Vdc	15pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H180J0 H03	COG (EIA)	50Vdc	18pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H180J0 H03	COG (EIA)	50Vdc	18pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H220J0 H03	COG (EIA)	50Vdc	22pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H220J0 H03	COG (EIA)	50Vdc	22pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H270J0 H03	COG (EIA)	50Vdc	27pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H270J0 H03	COG (EIA)	50Vdc	27pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H330J0   H03	COG (EIA)	50Vdc	33pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H330J0   H03	COG (EIA)	50Vdc	33pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H390J0   H03	COG (EIA)	50Vdc	39pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H390J0   H03	COG (EIA)	50Vdc	39pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H470J0   H03	COG (EIA)	50Vdc	47pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H470J0□□H03□	COG (EIA)	50Vdc	47pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H560J0 H03	COG (EIA)	50Vdc	56pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H560J0 H03	COG (EIA)	50Vdc	56pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H680J0 H03	COG (EIA)	50Vdc	68pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H680J0 H03	COG (EIA)	50Vdc	68pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H820J0 H03	COG (EIA)	50Vdc	82pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H820J0 H03	COG (EIA)	50Vdc	82pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H101J0 H03	COG (EIA)	50Vdc	100pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H101J0 H03	COG (EIA)	50Vdc	100pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H121J0 H03	COG (EIA)	50Vdc	120pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H121J0 H03	COG (EIA)	50Vdc	120pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H151J0 H03	COG (EIA)	50Vdc	150pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H151J0 H03	COG (EIA)	50Vdc	150pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H181J0 H03	COG (EIA)	50Vdc	180pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H181J0 H03	COG (EIA)	50Vdc	180pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H221J0 H03	COG (EIA)	50Vdc	220pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H221J0 H03	COG (EIA)	50Vdc	220pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H271J0 H03	COG (EIA)	50Vdc	270pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H271J0□□H03□	COG (EIA)	50Vdc	270pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H331J0 H03	COG (EIA)	50Vdc	330pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H331J0 H03	COG (EIA)	50Vdc	330pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H391J0 H03	COG (EIA)	50Vdc	390pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H391J0 H03	COG (EIA)	50Vdc	390pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H471J0 H03	COG (EIA)	50Vdc	470pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H471J0 H03	COG (EIA)	50Vdc	470pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H561J0 H03	COG (EIA)	50Vdc	560pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H561J0 H03	COG (EIA)	50Vdc	560pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H681J0 H03	COG (EIA)	50Vdc	680pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H681J0 H03	COG (EIA)	50Vdc	680pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H821J0 H03	COG (EIA)	50Vdc	820pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H821J0 H03	COG (EIA)	50Vdc	820pF±5%	5.0×3.5	2.5	2.5	P1	S1 M1
RDE5C1H102J0 H03	COG (EIA)	50Vdc	1000pF±5%	4.0×3.5	2.5	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping			
RDE5C1H102J0 H03	COG (EIA)	50Vdc	1000pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H122J0□□H03□	COG (EIA)	50Vdc	1200pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H122J0 H03	COG (EIA)	50Vdc	1200pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H152J0□□H03□	COG (EIA)	50Vdc	1500pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H152J0 H03	COG (EIA)	50Vdc	1500pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H182J0 H03	COG (EIA)	50Vdc	1800pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H182J0 H03	COG (EIA)	50Vdc	1800pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H222J0□□H03□	COG (EIA)	50Vdc	2200pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H222J0□□H03□	COG (EIA)	50Vdc	2200pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H272J0 H03	COG (EIA)	50Vdc	2700pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H272J0□□H03□	COG (EIA)	50Vdc	2700pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H332J0□□H03□	COG (EIA)	50Vdc	3300pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H332J0□□H03□	COG (EIA)	50Vdc	3300pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H392J0□□H03□	COG (EIA)	50Vdc	3900pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H392J0□□H03□	COG (EIA)	50Vdc	3900pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H472J1□□H03□	COG (EIA)	50Vdc	4700pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE5C1H472J1 H03	COG (EIA)	50Vdc	4700pF±5%	5.0×3.5	3.15	2.5	P1	S1			
RDE5C1H562J1□□H03□	COG (EIA)	50Vdc	5600pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE5C1H562J1 H03	COG (EIA)	50Vdc	5600pF±5%	5.0×3.5	3.15	2.5	P1	S1			
RDE5C1H682J1□□H03□	COG (EIA)	50Vdc	6800pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE5C1H682J1 H03	COG (EIA)	50Vdc	6800pF±5%	5.0×3.5	3.15	2.5	P1	S1			
RDE5C1H822J1 H03	COG (EIA)	50Vdc	8200pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE5C1H822J1 H03	COG (EIA)	50Vdc	8200pF±5%	5.0×3.5	3.15	2.5	P1	S1			
RDE5C1H103J1 H03	COG (EIA)	50Vdc	10000pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE5C1H103J1 H03	COG (EIA)	50Vdc	10000pF±5%	5.0×3.5	3.15	2.5	P1	S1			
RDE5C1H123J1 H03	COG (EIA)	50Vdc	12000pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE5C1H123J1 H03	COG (EIA)	50Vdc	12000pF±5%	5.0×3.5	3.15	2.5	P1	S1			
RDE5C1H153J1 H03	COG (EIA)	50Vdc	15000pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE5C1H153J1 H03	COG (EIA)	50Vdc	15000pF±5%	5.0×3.5	3.15	2.5	P1	S1			
RDE5C1H183J1 H03	COG (EIA)	50Vdc	18000pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE5C1H183J1 H03	COG (EIA)	50Vdc	18000pF±5%	5.0×3.5	3.15	2.5	P1	S1			
RDE5C1H223J1 H03 RDE5C1H223J1 H03	COG (EIA)	50Vdc 50Vdc	22000pF±5% 22000pF±5%	4.5×3.5 5.0×3.5	3.15 3.15	5.0 2.5	K1 P1	M1 S1			
RDE5C1H273J2 H03	COG (EIA)	50Vdc 50Vdc	27000pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C1H273J2 H03	COG (EIA)	50Vdc	27000pi ±5 %	5.5×4.0	3.15	2.5	P1	S1			
RDE5C1H333J2 H03	COG (EIA)	50Vdc	33000pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C1H333J2 H03	COG (EIA)	50Vdc	33000pF±5%	5.5×4.0	3.15	2.5	P1	S1			
RDE5C1H393J2 H03	COG (EIA)	50Vdc	39000pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C1H393J2 H03	COG (EIA)	50Vdc	39000pF±5%	5.5×4.0	3.15	2.5	P1	S1			
RDE5C1H473J2 H03	COG (EIA)	50Vdc	47000pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C1H473J2	COG (EIA)	50Vdc	47000pF±5%	5.5×4.0	3.15	2.5	P1	S1			
RDE5C1H563J2□□H03□	COG (EIA)	50Vdc	56000pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C1H563J2□□H03□	COG (EIA)	50Vdc	56000pF±5%	5.5×4.0	3.15	2.5	P1	S1			
RDE5C2A1R0C0 H03	COG (EIA)	100Vdc	1.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A1R0C0 H03	COG (EIA)	100Vdc	1.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A2R0C0 H03	COG (EIA)	100Vdc	2.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A2R0C0□□H03□	COG (EIA)	100Vdc	2.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A3R0C0 H03	COG (EIA)	100Vdc	3.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A3R0C0 H03	COG (EIA)	100Vdc	3.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A4R0C0□□H03□	COG (EIA)	100Vdc	4.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A4R0C0□□H03□	COG (EIA)	100Vdc	4.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A5R0C0□□H03□	COG (EIA)	100Vdc	5.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A5R0C0 H03	COG (EIA)	100Vdc	5.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A6R0D0□□H03□	COG (EIA)	100Vdc	6.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A6R0D0□□H03□	COG (EIA)	100Vdc	6.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A7R0D0□□H03□	COG (EIA)	100Vdc	7.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A7R0D0□□H03□	COG (EIA)	100Vdc	7.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1			

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW	Dimension T	Lead Space F	Lead Style Code	Lead Style Code			
RDE5C2A8R0D0□□H03□			0.0=5.05=5	(mm)	(mm)	(mm)	Bulk	Taping			
	COG (EIA)	100Vdc 100Vdc	8.0pF±0.5pF	4.0×3.5 5.0×3.5	2.5	5.0 2.5	K1 P1	M1 S1			
RDE5C2A8R0D0 H03 RDE5C2A9R0D0 H03	` '	100Vdc	8.0pF±0.5pF		2.5	5.0		M1			
	COG (EIA)	100Vdc	9.0pF±0.5pF	4.0×3.5 5.0×3.5	2.5	2.5	K1 P1	S1			
RDE5C2A9R0D0 H03 RDE5C2A100J0 H03	COG (EIA)	100Vdc	9.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A100J0 H03	COG (EIA)	100Vdc	10pF±5% 10pF±5%	4.0×3.5 5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A120J0 H03	COG (EIA)	100Vdc	12pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A120J0 H03	COG (EIA)	100Vdc	12pr ±5 %	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A150J0 H03	COG (EIA)	100Vdc	15pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A150J0 H03	COG (EIA)	100Vdc	15pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A180J0 H03	COG (EIA)	100Vdc	18pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A180J0 H03	COG (EIA)	100Vdc	18pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A220J0 H03	COG (EIA)	100Vdc	22pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A220J0 H03	COG (EIA)	100Vdc	22pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A270J0 H03	COG (EIA)	100Vdc	27pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A270J0 H03	COG (EIA)	100Vdc	27pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A330J0 H03	COG (EIA)	100Vdc	33pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A330J0 H03	COG (EIA)	100Vdc	33pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A390J0 H03	COG (EIA)	100Vdc	39pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A390J0 H03	COG (EIA)	100Vdc	39pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A470J0□□H03□	COG (EIA)	100Vdc	47pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A470J0□□H03□	COG (EIA)	100Vdc	47pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A560J0□□H03□	COG (EIA)	100Vdc	56pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A560J0 H03	COG (EIA)	100Vdc	56pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A680J0□□H03□	COG (EIA)	100Vdc	68pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A680J0 H03	COG (EIA)	100Vdc	68pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A820J0□□H03□	COG (EIA)	100Vdc	82pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A820J0□□H03□	COG (EIA)	100Vdc	82pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A101J0 H03	COG (EIA)	100Vdc	100pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A101J0 H03	COG (EIA)	100Vdc	100pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A121J0 H03	COG (EIA)	100Vdc	120pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A121J0□□H03□	COG (EIA)	100Vdc	120pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A151J0 H03	COG (EIA)	100Vdc	150pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A151J0 H03	COG (EIA)	100Vdc	150pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A181J0 H03	COG (EIA)	100Vdc	180pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A181J0 H03	COG (EIA)	100Vdc	180pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A221J0 H03	COG (EIA)	100Vdc	220pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A221J0 H03	COG (EIA)	100Vdc	220pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A271J0 H03	COG (EIA)	100Vdc	270pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A271J0 H03	COG (EIA)	100Vdc	270pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A331J0 H03	COG (EIA)	100Vdc	330pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A331J0 H03	COG (EIA)	100Vdc	330pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A391J0 H03	COG (EIA)	100Vdc 100Vdc	390pF±5%	4.0×3.5 5.0×3.5	2.5	5.0 2.5	K1 P1	M1 S1			
RDE5C2A391J0□□H03□ RDE5C2A471J0□□H03□	COG (EIA)	100Vdc	390pF±5%	4.0×3.5	2.5	5.0		<del> </del>			
RDE5C2A471J0 H03	COG (EIA)	100Vdc	470pF±5% 470pF±5%	5.0×3.5	2.5	2.5	K1 P1	M1 S1			
RDE5C2A561J0 H03	COG (EIA)	100Vdc	560pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A561J0 H03	COG (EIA)	100Vdc	560pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A681J0 H03	COG (EIA)	100Vdc	680pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A681J0 H03	COG (EIA)	100Vdc	680pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A821J0 H03	COG (EIA)	100Vdc	820pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A821J0 H03	COG (EIA)	100Vdc	820pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A102J0 H03	COG (EIA)	100Vdc	1000pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A102J0 H03	COG (EIA)	100Vdc	1000pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A122J0 H03	COG (EIA)	100Vdc	1200pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C2A122J0 H03	COG (EIA)	100Vdc	1200pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C2A152J0□□H03□	COG (EIA)	100Vdc	1500pF±5%	4.0×3.5	2.5	5.0	K1	M1			
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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE5C2A152J0 H03	COG (EIA)	100Vdc	1500pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A182J1 H03	COG (EIA)	100Vdc	1800pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C2A182J1□□H03□	COG (EIA)	100Vdc	1800pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C2A222J1□□H03□	COG (EIA)	100Vdc	2200pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C2A222J1 H03	COG (EIA)	100Vdc	2200pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C2A272J1 H03	COG (EIA)	100Vdc	2700pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C2A272J1 H03	COG (EIA)	100Vdc	2700pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C2A332J1 H03	COG (EIA)	100Vdc	3300pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C2A332J1□□H03□	COG (EIA)	100Vdc	3300pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C2A392J2 H03	COG (EIA)	100Vdc	3900pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A392J2□□H03□	COG (EIA)	100Vdc	3900pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A472J2□□H03□	COG (EIA)	100Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A472J2 H03	COG (EIA)	100Vdc	4700pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A562J2□□H03□	COG (EIA)	100Vdc	5600pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A562J2□□H03□	COG (EIA)	100Vdc	5600pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A682J2□□H03□	COG (EIA)	100Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A682J2 H03	COG (EIA)	100Vdc	6800pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A822J2□□H03□	COG (EIA)	100Vdc	8200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A822J2 H03	COG (EIA)	100Vdc	8200pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A103J2□□H03□	COG (EIA)	100Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A103J2 H03	COG (EIA)	100Vdc	10000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A123J2 H03	COG (EIA)	100Vdc	12000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A123J2 H03	COG (EIA)	100Vdc	12000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A153J2 H03	COG (EIA)	100Vdc	15000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A153J2 H03	COG (EIA)	100Vdc	15000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A183J2 H03	COG (EIA)	100Vdc	18000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A183J2 H03	COG (EIA)	100Vdc	18000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A223J2 H03	COG (EIA)	100Vdc	22000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A223J2 H03 RDE5C2E100J2 H03	COG (EIA)	100Vdc 250Vdc	22000pF±5% 10pF±5%	5.5×4.0 5.5×4.0	3.15	2.5 5.0	P1 K1	S1 M1
RDE5C2E120J2	COG (EIA)	250Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E150J2 H03	COG (EIA)	250Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E180J2 H03	COG (EIA)	250Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E220J2 H03	COG (EIA)	250Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E270J2 H03	COG (EIA)	250Vdc	27pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E330J2 H03	COG (EIA)	250Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E390J2 H03	COG (EIA)	250Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E470J2 H03	COG (EIA)	250Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E560J2 H03	COG (EIA)	250Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E680J2 H03	COG (EIA)	250Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E820J2 H03	COG (EIA)	250Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E101J2 H03	COG (EIA)	250Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E121J2□□H03□	COG (EIA)	250Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E151J2 H03	COG (EIA)	250Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E181J2 H03	COG (EIA)	250Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E221J2 H03	COG (EIA)	250Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E271J2 H03	COG (EIA)	250Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E331J2 H03	COG (EIA)	250Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E391J2 H03	COG (EIA)	250Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E471J2 H03	COG (EIA)	250Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E561J2 H03	COG (EIA)	250Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E681J2 H03	COG (EIA)	250Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E821J2 H03	COG (EIA)	250Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E102J2 H03	COG (EIA)	250Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E122J2 H03	COG (EIA)	250Vdc	1200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E152J2 H03	COG (EIA)	250Vdc	1500pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E182J2□□H03□	COG (EIA)	250Vdc	1800pF±5%	5.5×4.0	3.15	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE5C2E222J2 H03	COG (EIA)	250Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E272J2 H03	COG (EIA)	250Vdc	2700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E332J2 H03	COG (EIA)	250Vdc	3300pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E392J2 H03	COG (EIA)	250Vdc	3900pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E472J2 H03	COG (EIA)	250Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E562J2 H03	COG (EIA)	250Vdc	5600pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E682J2   H03	COG (EIA)	250Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E822J2 H03	COG (EIA)	250Vdc	8200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E103J2 H03	COG (EIA)	250Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E123J2 H03	COG (EIA)	250Vdc	12000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E153J2 H03	COG (EIA)	250Vdc	15000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J100J2 H03	COG (EIA)	630Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J120J2 H03	COG (EIA)	630Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J150J2 H03	COG (EIA)	630Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J180J2 H03	COG (EIA)	630Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J220J2 H03	COG (EIA)	630Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J270J2 H03	COG (EIA)	630Vdc	27pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J330J2 H03	COG (EIA)	630Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J390J2 H03	COG (EIA)	630Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J470J2 H03	COG (EIA)	630Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J560J2 H03	COG (EIA)	630Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J680J2 H03	COG (EIA)	630Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J820J2 H03	COG (EIA)	630Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J101J2 H03	COG (EIA)	630Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J121J2 H03	COG (EIA)	630Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J151J2 H03	COG (EIA)	630Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J181J2 H03	COG (EIA)	630Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J221J2□□H03□	COG (EIA)	630Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J271J2□□H03□	COG (EIA)	630Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J331J2 H03	COG (EIA)	630Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J391J2 H03	COG (EIA)	630Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J471J2 H03	COG (EIA)	630Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J561J2 H03	COG (EIA)	630Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J681J2 H03	COG (EIA)	630Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J821J2 H03	COG (EIA)	630Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J102J2 H03	COG (EIA)	630Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J122J2 H03	COG (EIA)	630Vdc	1200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J152J2 H03	COG (EIA)	630Vdc	1500pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J182J2 H03	COG (EIA)	630Vdc	1800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J222J2 H03	COG (EIA)	630Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J272J2 H03	COG (EIA)	630Vdc	2700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J332J2 H03	COG (EIA)	630Vdc	3300pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A100J2 H03	COG (EIA)	1000Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A120J2 H03	COG (EIA)	1000Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A150J2 H03	COG (EIA)	1000Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A180J2 H03	COG (EIA)	1000Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A220J2 H03	COG (EIA)	1000Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A270J2 H03	COG (EIA)	1000Vdc	27pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A330J2 H03	COG (EIA)	1000Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A390J2 H03	COG (EIA)	1000Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A470J2 H03	COG (EIA)	1000Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A560J2 H03	COG (EIA)	1000Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A680J2 H03	COG (EIA)	1000Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A820J2 H03	COG (EIA)	1000Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A101J2 H03	COG (EIA)	1000Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A121J2 H03	COG (EIA)	1000Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A151J2□□H03□	COG (EIA)	1000Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping			
RDE5C3A181J2 H03	COG (EIA)	1000Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A221J2□□H03□	COG (EIA)	1000Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A271J2 H03	COG (EIA)	1000Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A331J2 H03	COG (EIA)	1000Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A391J2 H03	COG (EIA)	1000Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A471J2 H03	COG (EIA)	1000Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A561J2 H03	COG (EIA)	1000Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A681J2□□H03□	COG (EIA)	1000Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A821J2 H03	COG (EIA)	1000Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A102J2 H03	COG (EIA)	1000Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2E101J1 H03	U2J (EIA)	250Vdc	100pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE7U2E151J1 H03	U2J (EIA)	250Vdc	150pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE7U2E221J1 H03	U2J (EIA)	250Vdc	220pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE7U2E331J1 H03	U2J (EIA)	250Vdc	330pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE7U2E471J1 H03	U2J (EIA)	250Vdc	470pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE7U2E681J1 H03	U2J (EIA)	250Vdc	680pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE7U2E102J1 H03	U2J (EIA)	250Vdc	1000pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE7U2E152J1 H03	U2J (EIA)	250Vdc	1500pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE7U2E222J1 H03	U2J (EIA)	250Vdc	2200pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE7U2E332J1 H03	U2J (EIA)	250Vdc	3300pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE7U2E472J1 H03	U2J (EIA)	250Vdc	4700pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE7U2E682J2□□H03□	U2J (EIA)	250Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2E103J2 H03	U2J (EIA)	250Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2E153J2 H03	U2J (EIA)	250Vdc	15000pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2E223J2□□H03□	U2J (EIA)	250Vdc	22000pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2E333J3 H03	U2J (EIA)	250Vdc	33000pF±5%	5.5×5.0	4.0	5.0	K1	M1			
RDE7U2E473J3 H03	U2J (EIA)	250Vdc	47000pF±5%	5.5×5.0	4.0	5.0	K1	M1			
RDE7U2J100J2 H03	U2J (EIA)	630Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J150J2 H03	U2J (EIA)	630Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J220J2□□H03□	U2J (EIA)	630Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J330J2□□H03□	U2J (EIA)	630Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J470J2 H03	U2J (EIA)	630Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J680J2□□H03□	U2J (EIA)	630Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J101J2 H03	U2J (EIA)	630Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J151J2 H03	U2J (EIA)	630Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J221J2 H03	U2J (EIA)	630Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J331J2 H03	U2J (EIA)	630Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J471J2 H03	U2J (EIA)	630Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J681J2 H03	U2J (EIA)	630Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J102J2 H03	U2J (EIA)	630Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J152J2 H03	U2J (EIA)	630Vdc	1500pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J222J2 H03	U2J (EIA)	630Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J332J2 H03	U2J (EIA)	630Vdc	3300pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J472J2 H03	U2J (EIA)	630Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J682J3 H03	U2J (EIA)	630Vdc	6800pF±5%	5.5×5.0	4.0	5.0	K1	M1			
RDE7U2J103J3 H03	U2J (EIA)	630Vdc	10000pF±5%	5.5×5.0	4.0	5.0	K1	M1			
RDE7U2J153J4 H03	U2J (EIA)	630Vdc	15000pF±5%	7.5×5.5	4.0	5.0	K1	M1			
RDE7U2J223J4 H03	U2J (EIA)	630Vdc	22000pF±5%	7.5×5.5	4.0	5.0	K1	M1			
RDE7U2J333J5 H03	U2J (EIA)	630Vdc	33000pF±5%	7.5×8.0	4.0	5.0	B1	E1			
RDE7U2J473J5 H03	U2J (EIA)	630Vdc 630Vdc	47000pF±5%	7.5×8.0 7.7×13.0	4.0	5.0 5.0	B1	E1			
RDE7U2J943JU H03 RDE7U3A100J2 H03	U2J (EIA) U2J (EIA)	1000Vdc	94000pF±5% 10pF±5%	7.7×13.0 5.5×4.0	3.15	5.0	B1 K1	E1 M1			
RDE7U3A150J2 H03	U2J (EIA)	1000Vdc	15pF±5%	5.5×4.0 5.5×4.0	3.15	5.0	K1	M1			
RDE7U3A220J2 H03	U2J (EIA)	1000Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U3A330J2 H03	U2J (EIA)	1000Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U3A470J2 H03	U2J (EIA)	1000Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U3A680J2 H03	U2J (EIA)	1000Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1			
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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE7U3A101J2 H03	U2J (EIA)	1000Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A151J2□□H03□	U2J (EIA)	1000Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A221J2 H03	U2J (EIA)	1000Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A331J2□□H03□	U2J (EIA)	1000Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A471J2□□H03□	U2J (EIA)	1000Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A681J2   H03	U2J (EIA)	1000Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A102J2 H03	U2J (EIA)	1000Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A152J3□□H03□	U2J (EIA)	1000Vdc	1500pF±5%	5.5×5.0	4.0	5.0	K1	M1
RDE7U3A222J3□□H03□	U2J (EIA)	1000Vdc	2200pF±5%	5.5×5.0	4.0	5.0	K1	M1
RDE7U3A332J4□□H03□	U2J (EIA)	1000Vdc	3300pF±5%	7.5×5.5	4.0	5.0	K1	M1
RDE7U3A472J4□□H03□	U2J (EIA)	1000Vdc	4700pF±5%	7.5×5.5	4.0	5.0	K1	M1
RDE7U3A682J5□□H03□	U2J (EIA)	1000Vdc	6800pF±5%	7.5×8.0	4.0	5.0	B1	E1
RDE7U3A103J5□□H03□	U2J (EIA)	1000Vdc	10000pF±5%	7.5×8.0	4.0	5.0	B1	E1
RDE7U3A203JU□□H03□	U2J (EIA)	1000Vdc	20000pF±5%	7.7×13.0	4.0	5.0	B1	E1

 $Two \ blank \ columns \ are \ filled \ with \ the \ lead \ style \ code. \ Please \ refer \ to \ the \ 3 \ columns \ on \ the \ right \ for \ the \ appropriate \ code.$ 

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDER71E104K0□□H03□	X7R (EIA)	25Vdc	0.1µF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71E104K0 H03	X7R (EIA)	25Vdc	0.1µF±10%	5.0×3.5	2.5	2.5	P1	S1
RDEC71E224K0 H03	X7S (EIA)	25Vdc	0.22µF±10%	4.0×3.5	2.5	5.0	K1	M1
RDEC71E224K0□□H03□	X7S (EIA)	25Vdc	0.22µF±10%	5.0×3.5	2.5	2.5	P1	S1
RDEC71E474K0□□H03□	X7S (EIA)	25Vdc	0.47µF±10%	4.0×3.5	2.5	5.0	K1	M1
RDEC71E474K0□□H03□	X7S (EIA)	25Vdc	0.47µF±10%	5.0×3.5	2.5	2.5	P1	S1
RDEC71E105K0□□H03□	X7S (EIA)	25Vdc	1.0µF±10%	4.0×3.5	2.5	5.0	K1	M1
RDEC71E105K0□□H03□	X7S (EIA)	25Vdc	1.0µF±10%	5.0×3.5	2.5	2.5	P1	S1
RDEC71E225K1 H03	X7S (EIA)	25Vdc	2.2µF±10%	4.5×3.5	3.15	5.0	K1	M1
RDEC71E225K1 H03	X7S (EIA)	25Vdc	2.2µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDEC71E475K2□□H03□	X7S (EIA)	25Vdc	4.7µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDEC71E475K2□□H03□	X7S (EIA)	25Vdc	4.7µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDEC71E106K2□□H03□	X7S (EIA)	25Vdc	10μF±10%	5.5×4.0	3.15	2.5	P1	S1
RDEC71E106K2□□H03□	X7S (EIA)	25Vdc	10μF±10%	5.5×4.0	3.15	5.0	K1	M1
RDEC71E226K3□□H03□	X7S (EIA)	25Vdc	22μF±10%	5.5×5.0	4.0	2.5	P1	S1
RDEC71E226K3□□H03□	X7S (EIA)	25Vdc	22μF±10%	5.5×5.0	4.0	5.0	K1	M1
RDEC71E476MW H03	X7S (EIA)	25Vdc	47μF±20%	5.5×7.5	4.0	5.0	K1	M1
RDER71H221K0□□H03□	X7R (EIA)	50Vdc	220pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H221K0□□H03□	X7R (EIA)	50Vdc	220pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H331K0□□H03□	X7R (EIA)	50Vdc	330pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H331K0□□H03□	X7R (EIA)	50Vdc	330pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H471K0□□H03□	X7R (EIA)	50Vdc	470pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H471K0□□H03□	X7R (EIA)	50Vdc	470pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H681K0□□H03□	X7R (EIA)	50Vdc	680pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H681K0□□H03□	X7R (EIA)	50Vdc	680pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H102K0□□H03□	X7R (EIA)	50Vdc	1000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H102K0□□H03□	X7R (EIA)	50Vdc	1000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H152K0□□H03□	X7R (EIA)	50Vdc	1500pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H152K0□□H03□	X7R (EIA)	50Vdc	1500pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H222K0□□H03□	X7R (EIA)	50Vdc	2200pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H222K0□□H03□	X7R (EIA)	50Vdc	2200pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H332K0□□H03□	X7R (EIA)	50Vdc	3300pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H332K0□□H03□	X7R (EIA)	50Vdc	3300pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H472K0□□H03□	X7R (EIA)	50Vdc	4700pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H472K0□□H03□	X7R (EIA)	50Vdc	4700pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H682K0□□H03□	X7R (EIA)	50Vdc	6800pF±10%	4.0×3.5	2.5	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping		
RDER71H682K0□□H03□	X7R (EIA)	50Vdc	6800pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER71H103K0 H03	X7R (EIA)	50Vdc	10000pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER71H103K0□□H03□	X7R (EIA)	50Vdc	10000pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER71H153K0□□H03□	X7R (EIA)	50Vdc	15000pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER71H153K0□□H03□	X7R (EIA)	50Vdc	15000pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER71H223K0□□H03□	X7R (EIA)	50Vdc	22000pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER71H223K0   H03	X7R (EIA)	50Vdc	22000pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER71H333K0□□H03□	X7R (EIA)	50Vdc	33000pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER71H333K0□□H03□	X7R (EIA)	50Vdc	33000pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER71H473K0□□H03□	X7R (EIA)	50Vdc	47000pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER71H473K0□□H03□	X7R (EIA)	50Vdc	47000pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER71H683K0□□H03□	X7R (EIA)	50Vdc	68000pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER71H683K0□□H03□	X7R (EIA)	50Vdc	68000pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER71H104K0□□H03□	X7R (EIA)	50Vdc	0.1µF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER71H104K0□□H03□	X7R (EIA)	50Vdc	0.1µF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER71H154K1□□H03□	X7R (EIA)	50Vdc	0.15µF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER71H154K1□□H03□	X7R (EIA)	50Vdc	0.15µF±10%	5.0×3.5	3.15	2.5	P1	S1		
RDER71H224K1□□H03□	X7R (EIA)	50Vdc	0.22µF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER71H224K1□□H03□	X7R (EIA)	50Vdc	0.22µF±10%	5.0×3.5	3.15	2.5	P1	S1		
RDER71H334K1□□H03□	X7R (EIA)	50Vdc	0.33µF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER71H334K1□□H03□	X7R (EIA)	50Vdc	0.33µF±10%	5.0×3.5	3.15	2.5	P1	S1		
RDER71H474K1□□H03□	X7R (EIA)	50Vdc	0.47µF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER71H474K1 H03	X7R (EIA)	50Vdc	0.47µF±10%	5.0×3.5	3.15	2.5	P1	S1		
RDER71H684K2	X7R (EIA)	50Vdc	0.68µF±10%	5.5×4.0	3.15	2.5	P1	S1		
RDER71H684K2	X7R (EIA)	50Vdc	0.68µF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDEC71H105K1 H03	X7S (EIA)	50Vdc	1.0µF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDEC71H105K1 H03	X7S (EIA)	50Vdc	1.0µF±10%	5.0×3.5	3.15	2.5	P1	S1		
RDER71H105K2 H03	X7R (EIA)	50Vdc	1.0µF±10%	5.5×4.0	3.15	2.5	P1	S1		
RDER71H105K2 H03	X7R (EIA)	50Vdc 50Vdc	1.0µF±10%	5.5×4.0 5.5×4.0	3.15	5.0 2.5	K1 P1	M1 S1		
RDER71H155K2   H03   RDER71H155K2   H03	X7R (EIA) X7R (EIA)	50Vdc	1.5μF±10% 1.5μF±10%	5.5×4.0	3.15 3.15	5.0	K1	M1		
RDER71H225K2   H03	X7R (EIA)	50Vdc	2.2µF±10%	5.5×4.0	3.15	2.5	P1	S1		
RDER71H225K2   H03	X7R (EIA)	50Vdc	2.2μF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER71H335K3   H03	X7R (EIA)	50Vdc	3.3µF±10%	5.5×5.0	4.0	2.5	P1	S1		
RDER71H335K3   H03	X7R (EIA)	50Vdc	3.3µF±10%	5.5×5.0	4.0	5.0	K1	M1		
RDEC71H475K2   H03	X7S (EIA)	50Vdc	4.7µF±10%	5.5×4.0	3.15	2.5	P1	S1		
RDEC71H475K2□□H03□	X7S (EIA)	50Vdc	4.7µF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDEC71H106K3□□H03□	X7S (EIA)	50Vdc	10μF±10%	5.5×5.0	4.0	2.5	P1	S1		
RDEC71H106K3 H03	X7S (EIA)	50Vdc	10μF±10%	5.5×5.0	4.0	5.0	K1	M1		
RDEC71H226MW□□H03□	X7S (EIA)	50Vdc	22μF±20%	5.5×7.5	4.0	5.0	K1	M1		
RDER72A221K0□□H03□	X7R (EIA)	100Vdc	220pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER72A221K0□□H03□	X7R (EIA)	100Vdc	220pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER72A331K0□□H03□	X7R (EIA)	100Vdc	330pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER72A331K0□□H03□	X7R (EIA)	100Vdc	330pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER72A471K0 H03	X7R (EIA)	100Vdc	470pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER72A471K0□□H03□	X7R (EIA)	100Vdc	470pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER72A681K0□□H03□	X7R (EIA)	100Vdc	680pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER72A681K0□□H03□	X7R (EIA)	100Vdc	680pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER72A102K0□□H03□	X7R (EIA)	100Vdc	1000pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER72A102K0□□H03□	X7R (EIA)	100Vdc	1000pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER72A152K0□□H03□	X7R (EIA)	100Vdc	1500pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER72A152K0□□H03□	X7R (EIA)	100Vdc	1500pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER72A222K0□□H03□	X7R (EIA)	100Vdc	2200pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER72A222K0□□H03□	X7R (EIA)	100Vdc	2200pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER72A332K0□□H03□	X7R (EIA)	100Vdc	3300pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER72A332K0□□H03□	X7R (EIA)	100Vdc	3300pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER72A472K0□□H03□	X7R (EIA)	100Vdc	4700pF±10%	4.0×3.5	2.5	5.0	K1	M1		

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping		
RDER72A472K0   H03	X7R (EIA)	100Vdc	4700pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER72A682K0□□H03□	X7R (EIA)	100Vdc	6800pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER72A682K0□□H03□	X7R (EIA)	100Vdc	6800pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER72A103K0□□H03□	X7R (EIA)	100Vdc	10000pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER72A103K0□□H03□	X7R (EIA)	100Vdc	10000pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER72A153K0□□H03□	X7R (EIA)	100Vdc	15000pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER72A153K0□□H03□	X7R (EIA)	100Vdc	15000pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER72A223K0□□H03□	X7R (EIA)	100Vdc	22000pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RDER72A223K0 H03	X7R (EIA)	100Vdc	22000pF±10%	5.0×3.5	2.5	2.5	P1	S1		
RDER72A333K1 H03	X7R (EIA)	100Vdc	33000pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72A333K1 H03	X7R (EIA)	100Vdc	33000pF±10%	5.0×3.5	3.15	2.5	P1	S1		
RDER72A473K1 H03	X7R (EIA)	100Vdc	47000pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72A473K1 H03	X7R (EIA)	100Vdc	47000pF±10%	5.0×3.5	3.15	2.5	P1	S1		
RDER72A683K1 H03	X7R (EIA)	100Vdc	68000pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72A683K1 H03	X7R (EIA)	100Vdc	68000pF±10%	5.0×3.5	3.15	2.5	P1	S1		
RDER72A104K1 H03	X7R (EIA)	100Vdc	0.1µF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72A104K1 H03	X7R (EIA)	100Vdc	0.1µF±10%	5.0×3.5	3.15	2.5	P1	S1		
RDER72A154K2 H03	X7R (EIA)	100Vdc	0.15µF±10%	5.5×4.0	3.15	2.5	P1	S1		
RDER72A154K2 H03	X7R (EIA)	100Vdc	0.15μF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72A224K1 H03	X7R (EIA)	100Vdc	0.22µF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72A224K1 H03	X7R (EIA)	100Vdc	0.22μF±10%	5.0×3.5	3.15	2.5	P1	S1		
RDER72A334K1 H03	X7R (EIA)	100Vdc	0.33µF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72A334K1 H03	X7R (EIA)	100Vdc	0.33µF±10%	5.0×3.5	3.15	2.5	P1	S1		
RDER72A474K1   H03	X7R (EIA)	100Vdc	0.47µF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72A474K1   H03	X7R (EIA)	100Vdc	0.47µF±10%	5.0×3.5	3.15	2.5	P1	S1		
RDER72A684K2 H03	X7R (EIA)	100Vdc	0.68μF±10%	5.5×4.0	3.15	2.5	P1	S1		
RDER72A684K2 H03	X7R (EIA)	100Vdc	0.68µF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72A105K2 H03	X7R (EIA)	100Vdc	1.0µF±10%	5.5×4.0	3.15	2.5	P1	S1		
RDER72A105K2 H03	X7R (EIA)	100Vdc	1.0µF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDEC72A155K3 H03	X7X (EIA)	100Vdc	1.5µF±10%	5.5×5.0	4.0	2.5	P1	S1		
RDEC72A155K3 H03	X7S (EIA)	100Vdc	1.5µF±10%	5.5×5.0	4.0	5.0	K1	M1		
RDEC72A225K3 H03	X7S (EIA)	100Vdc	2.2µF±10%	5.5×5.0	4.0	2.5	P1	S1		
RDEC72A225K3 H03	X7S (EIA)	100Vdc	2.2µF±10%	5.5×5.0	4.0	5.0	K1	M1		
RDEC72A475MW H03	X7S (EIA)	100Vdc	4.7µF±20%	5.5×7.5	4.0	5.0	K1	M1		
RDER72E102K1□□H03□	X7R (EIA)	250Vdc	1000pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72E152K1 H03	X7R (EIA)	250Vdc	1500pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72E222K1 H03	X7R (EIA)	250Vdc	2200pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72E332K1 H03	X7R (EIA)	250Vdc	3300pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72E472K1 H03	X7R (EIA)	250Vdc	4700pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72E682K1 H03	X7R (EIA)	250Vdc	6800pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72E103K1 H03	X7R (EIA)	250Vdc	10000pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72E153K1□□H03□	X7R (EIA)	250Vdc	15000pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72E223K1□□H03□	X7R (EIA)	250Vdc	22000pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72E333K2□□H03□	X7R (EIA)	250Vdc	33000pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72E473K2□□H03□	X7R (EIA)	250Vdc	47000pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72E683K2□□H03□	X7R (EIA)	250Vdc	68000pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72E104K2 H03	X7R (EIA)	250Vdc	0.10µF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72E154K3 H03	X7R (EIA)	250Vdc	0.15µF±10%	5.5×5.0	3.15	5.0	K1	M1		
RDER72E224K3 H03	X7R (EIA)	250Vdc	0.22µF±10%	5.5×5.0	3.15	5.0	K1	M1		
RDER72E334K4□□H03□	X7R (EIA)	250Vdc	0.33µF±10%	7.5×5.5	4.0	5.0	K1	M1		
RDER72E474K4	X7R (EIA)	250Vdc	0.47µF±10%	7.5×5.5	4.0	5.0	K1	M1		
RDER72E684K5 H03	X7R (EIA)	250Vdc	0.68µF±10%	7.5×7.5	4.0	5.0	B1	E1		
RDER72E105K5 H03	X7R (EIA)	250Vdc	1.0µF±10%	7.5×7.5	4.0	5.0	B1	E1		
RDER72E225MU H03	X7R (EIA)	250Vdc	2.2µF±20%	7.7×12.5	4.0	5.0	B1	E1		
RDER72H102K1 H03	X7R (EIA)	500Vdc	1000pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72H152K1 H03	X7R (EIA)	500Vdc	1500pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72H222K1□□H03□	X7R (EIA)	500Vdc	2200pF±10%	4.5×3.5	3.15	5.0	K1	M1		
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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping		
RDER72H332K1 H03	X7R (EIA)	500Vdc	3300pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72H472K1□□H03□	X7R (EIA)	500Vdc	4700pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72H682K1□□H03□	X7R (EIA)	500Vdc	6800pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72H103K1□□H03□	X7R (EIA)	500Vdc	10000pF±10%	4.5×3.5	3.15	5.0	K1	M1		
RDER72H153K2□□H03□	X7R (EIA)	500Vdc	15000pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72H223K2   H03	X7R (EIA)	500Vdc	22000pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72H333K2   H03	X7R (EIA)	500Vdc	33000pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72H473K2□□H03□	X7R (EIA)	500Vdc	47000pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72H683K3□□H03□	X7R (EIA)	500Vdc	68000pF±10%	5.5×5.0	4.0	5.0	K1	M1		
RDER72H104K3□□H03□	X7R (EIA)	500Vdc	0.1µF±10%	5.5×5.0	4.0	5.0	K1	M1		
RDER72H154K4   H03	X7R (EIA)	500Vdc	0.15µF±10%	7.5×5.5	4.0	5.0	K1	M1		
RDER72H224K4□□H03□	X7R (EIA)	500Vdc	0.22µF±10%	7.5×5.5	4.0	5.0	K1	M1		
RDER72H334K5   H03	X7R (EIA)	500Vdc	0.33µF±10%	7.5×7.5	4.0	5.0	B1	E1		
RDER72H474K5□□H03□	X7R (EIA)	500Vdc	0.47µF±10%	7.5×7.5	4.0	5.0	B1	E1		
RDER72H684MU□□H03□	X7R (EIA)	500Vdc	0.68µF±20%	7.7×12.5	4.0	5.0	B1	E1		
RDER72H105MU□□H03□	X7R (EIA)	500Vdc	1.0µF±20%	7.7×12.5	4.0	5.0	B1	E1		
RDER72J102K2□□H03□	X7R (EIA)	630Vdc	1000pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72J152K2□□H03□	X7R (EIA)	630Vdc	1500pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72J222K2□□H03□	X7R (EIA)	630Vdc	2200pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72J332K2□□H03□	X7R (EIA)	630Vdc	3300pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72J472K2□□H03□	X7R (EIA)	630Vdc	4700pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72J682K2□□H03□	X7R (EIA)	630Vdc	6800pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72J103K2□□H03□	X7R (EIA)	630Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72J153K2□□H03□	X7R (EIA)	630Vdc	15000pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72J223K2□□H03□	X7R (EIA)	630Vdc	22000pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER72J333K3□□H03□	X7R (EIA)	630Vdc	33000pF±10%	5.5×5.0	3.15	5.0	K1	M1		
RDER72J473K3□□H03□	X7R (EIA)	630Vdc	47000pF±10%	5.5×5.0	3.15	5.0	K1	M1		
RDER72J683K4□□H03□	X7R (EIA)	630Vdc	68000pF±10%	7.5×5.5	3.15	5.0	K1	M1		
RDER72J104K4□□H03□	X7R (EIA)	630Vdc	0.10µF±10%	7.5×5.5	3.15	5.0	K1	M1		
RDER72J154K5□□H03□	X7R (EIA)	630Vdc	0.15µF±10%	7.5×8.0	4.0	5.0	B1	E1		
RDER72J224K5□□H03□	X7R (EIA)	630Vdc	0.22µF±10%	7.5×8.0	4.0	5.0	B1	E1		
RDER72J474MU□□H03□	X7R (EIA)	630Vdc	0.47µF±20%	7.7×13.0	4.0	5.0	B1	E1		
RDER73A471K2□□H03□	X7R (EIA)	1000Vdc	470pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER73A681K2□□H03□	X7R (EIA)	1000Vdc	680pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER73A102K2□□H03□	X7R (EIA)	1000Vdc	1000pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER73A152K2□□H03□	X7R (EIA)	1000Vdc	1500pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER73A222K2□□H03□	X7R (EIA)	1000Vdc	2200pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER73A332K2□□H03□	X7R (EIA)	1000Vdc	3300pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER73A472K2□□H03□	X7R (EIA)	1000Vdc	4700pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER73A682K2□□H03□	X7R (EIA)	1000Vdc	6800pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER73A103K2□□H03□	X7R (EIA)	1000Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1		
RDER73A153K3 H03	X7R (EIA)	1000Vdc	15000pF±10%	5.5×5.0	4.0	5.0	K1	M1		
RDER73A223K3□□H03□	X7R (EIA)	1000Vdc	22000pF±10%	5.5×5.0	4.0	5.0	K1	M1		
RDER73A333K4 H03	X7R (EIA)	1000Vdc	33000pF±10%	7.5×5.5	4.0	5.0	K1	M1		
RDER73A473K4 H03	X7R (EIA)	1000Vdc	47000pF±10%	7.5×5.5	4.0	5.0	K1	M1		
RDER73A683K5□□H03□	X7R (EIA)	1000Vdc	68000pF±10%	7.5×8.0	4.0	5.0	B1	E1		
RDER73A104K5 H03	X7R (EIA)	1000Vdc	0.10µF±10%	7.5×8.0	4.0	5.0	B1	E1		
RDER73A224MU□□H03□	X7R (EIA)	1000Vdc	0.22µF±20%	7.7×13.0	4.0	5.0	B1	E1		

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code. The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

Operating Ten Range Appearance	g Temperature  on and Marking  Between Terminals	Temperature Compensating Ty -55 to +125°C  No defects or abnormalities  See previous pages  No defects or abnormalities	Pigh Dielectric Constant Type  Char. X7R, X7S: -55 to +125°C		ould not be dama are applied betwe arge/Discharge cu	een the terminals
Range	nce on and Marking Between	No defects or abnormalities See previous pages	Char. X7R, X7S: -55 to +125°C	Visual inspection, The capacitors should voltages of Table afor 1 to 5sec. (Chairmann Rain Rain Park Park Park Park Park Park Park Park	ould not be dama are applied betwe arge/Discharge cu	een the terminals
• •	n and Marking  Between	See previous pages		Visual inspection, The capacitors should voltages of Table afor 1 to 5sec. (Chairmann Rain Rain Park Park Park Park Park Park Park Park	ould not be dama are applied betwe arge/Discharge cu	een the terminals
Dimension and	Between			The capacitors show voltages of Table of for 1 to 5 sec. (Characteristics)	ould not be dama are applied betwe arge/Discharge cu	een the terminals
		No defects or abnormalities		voltages of Table a for 1 to 5sec. (Cha	are applied betwe arge/Discharge cu	een the terminals
			Type DC: Compensating DC: Type DC: High Dielectric Constant Type DC:	250V 200 630V 150 1kV 130 5V,DC50V,DC100V 250 250V 200 500V,DC630V 150	Test Voltage % of the rated voltage	
Dielectric Strength		No defects or abnormalities		The capacitor is placed in a container with metal balls of 1mm diameter so that each terminal, short-circuited, is kept approximately 2mm from the balls as shown in the figure, for 1 to 5 sec. between capacitor terminals and metal balls. (Charge/Discharge current ≤ 50mA)  Rated Voltage Test Voltage  DC25V,DC50V,DC100V 250% of the rated voltage DC250V, DC500V 200% of the rated voltage DC630V, DC1kV DC1300V		
nsulation Resistance		More than 10,000M or 500MΩ • μF (Whichever is smaller)	High Dielectric Constant Type ated voltage: C25V, DC50V, DC100V fore than 10,000M or 500MΩ • μF Whichever is smaller) ated voltage: C250V, DC500V, DC630V, DC1kV fore than 10,000M or 100MΩ • μF Whichever is smaller)	The insulation resistance should be measured with a DC voltage not exceeding the rated voltage (DC500V in case of rated vlotage: DC500V, DC630V, DC1kV) at normal temperature and humidity and within 2min. of charging.  (Charge/Discharge current ≤ 50mA)		
Capacitance	nce	Within the specified tolerand	ce			
	ation Factor (D.F.)	30pF min.: Q $\ge$ 1,000 30pF max.: Q $\ge$ 400+20C C: Nominal capacitance (pF)	Char. X7R: 0.025 max. Char. X7S: 0.125 max.	Temperature Com Capacitance C ≦ 1000pF  C > 1000pF	pensating Type Frequency 1±0.1MHz 1±0.1kHz	Voltage AC0.5 to 5V (r.m.s.) AC1±0.2V (r.m.s.)  Voltage AC1±0.2V (r.m.s.)  AC1±0.2V (r.m.s.)
ap		pacitance Dissipation Factor (D.F.)	30pF min.: Q ≥ 1,000 30pF max.: Q ≥ 400+20C	30pF min.: Q ≧ 1,000 30pF min.: Q ≥ 1,000 Char. X7R: 0.025 max.	at the frequency at Temperature Com Capacitance $C \le 1000 pF$ Char. X7R: 0.025 max.  Char. X7S: 0.125 max.  Char. X7S: 0.125 max.  High Dielectric Co Capacitance	at the frequency and voltage shows Temperature Compensating Type Capacitance Frequency  30pF min.: $Q \ge 1,000$ 30pF max.: $Q \ge 400+20C$ C: Nominal capacitance (pF)  Char. X7R: 0.025 max. Char. X7S: 0.125 max.  Char. X7S: 0.125 max.  High Dielectric Constant Type Capacitance Frequency

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NL				Specifi	cations			Tost Mothad	
No.	Ite	m	Tempera	ture Compensating Type	High Diel	ectric Constant Type		Test Method	
8	Capacitance T	Capacitance Temperature		Temperature Coefficient 25 to 125°C: 0±30ppm/°C -55 to 25°C: 0+30/-72ppm/°C	Char. Capacitance Change X7R Within ± 15%		The capacitance change should be measured after \$\foxed{S}\$ min. at each specified temperature stage.  The temperature coefficient is determined using the capacitance measured in step 3 as a reference. Whe cycling the temperature sequentially from step 1 through 5 (-55 to +125°C) the capacitance should be within the specified tolerance for the temperature coefficient and capacitance change.  Step Temperature (°C)  1 25±2		
	Characteristic	5		25 to 125°C: -750±120ppm/°C	X7S	Within ± 22%	2	-55±3	
			U2J	-55 to 25°C:			3 4	25±2 125±3	
				-750+120/-347ppm/°C			5	25±2	
							<ul> <li>Pretreatment (for high dielectric constant type)</li> <li>Perform a heat treatment at 150+0/-10°C for 1hr.,</li> <li>and then let sit at room temperature for 24±2hrs.</li> </ul>		
9	Terminal Strength	Tensile Strength	Termina	tion not to be broken or	·loosened		gradually to each l	the capacitor body, apply the force ead in the radial direction of the ching 10N and then keep the force ec.	
		Bending Strength	Termina	tion not to be broken or	loosened		Each lead wire should be subjected to a force of 2.5N and then bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3sec.		
		Appearance	No defe	cts or abnormalities			The capacitor should be firmly soldered to the supporting lead wire and vibrated at a frequency range of 10 to 55Hz, 1.5mm in total amplitude, with about a		
	Vibration	Capacitance	Within t	he specified tolerance					
10	Resistance	Q/D.F.	30pF ma	n.: Q ≧ 1,000 ax.: Q ≧ 400+20C nal capacitance (pF)		R: 0.025 max. 5: 0.125 max.	1 minute rate of vi and back to 10Hz.	bration change from 10Hz to 55Hz Apply for a total of 6hrs., 2hrs. each endicular directions.	
11	Solderability of Leads			re should be soldered wi n over 3/4 of the circum		•	(JIS-K-8101) solut then into molten so depth of dipping is terminal body. Temp. of solder: 245	apacitor is dipped into a 25% ethanol tion of rosin (JIS-K-5902) and older for 2±0.5sec. In both cases the up to about 1.5mm to 2mm from the ±5°C Lead Free Solder (Sn-3.0Ag-0.5Cu) ±5°C H60A or H63A Eutectic Solder	
	Resistance to	t		asured and observed cha ations in the following ta		s should satisfy the	solder 1.5 to 2.0m	uld be immersed in the melted m from the root of terminal at	
	(Non-Preheat)	Appearance	No defe	cts or abnormalities			260±5°C for 7.5+0 Pre-treatment	)/-1sec.	
12 ' 1		Capacitance Change		2.5% or ±0.25pF ver is larger)		R: Within ±7.5% b: Within ±10%	Capacitor should I then place at roor	be stored at 150+0/-10°C for 1hr., n temperature for 24±2hrs.	
1	Dielectric Strength (Between Terminals)		No defe	cts			before initial measurement. (For Char. X7R, X7S) Post-treatment Capacitor should be stored for 24±2hrs. at* room condition.		

<sup>\* &</sup>quot;room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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	lo. Item		Specif	ications					
No.	Ite	m	Temperature Compensating Type	High Dielectric Constant Type		Test Method			
	Resistance to Soldering Hear	ŧ	The measured and observed chaspecifications in the following to	•	First the ca	apacitor should be stored at 1.	20+0/-5°C for		
	(On-Preheat)	Appearance	No defects or abnormalities			ead wires should be immersed to 2.0mm from the root of ter			
12		Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Char. X7R: Within ±7.5% Char. X7S: Within ±10%		or 7.5+0/-1sec.	illillat at		
2		Dielectric Strength (Between Terminals)	No defects		then place initial mea Post-treat	should be stored for 24±2hrs.	2hrs. befor 5)		
	Resistance to Soldering Heat		The measured and observed chaspecifications in the following to	•	Test condi Temperra	tion ture of iron-tip: 350±10°C			
	(Soldering Iron Method)	Appearance	No defects or abnormalities		Soldering time: 3.5±0.5sec. Soldering position Straight Lead: 1.5 to 2.0mm from the root of termin Crimp Lead: 1.5 to 2.0mm from the end of lead ben				
12	mont lechody	Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Char. X7R: Within ±7.5% Char. X7S: Within ±10%					
3		Dielectric Strength (Between Terminals)	No defects		Pre-treatment Capacitor should be stored at 150+0/-10°C for 1hr., then place at room temperature for 24±2hrs. before initial measurement. (For Char. X7R, X7S) Post-treatment Capacitor should be stored for 24±2hrs. at* room condition.				
		Appearance	No defects or abnormalities						
		Capacitance Change	Within ±5% or ±0.5pF (whichever is larger)	Char. X7R, X7S: Within ±12.5%	cycles.	itor should be subjected to 5 t	·		
13	Temperature Cycle	Q/D.F.	30pF min.: Q ≧ 350 10pF to 30pF: Q ≧ 275+5C/2 10pF max.: Q ≧ 200+10C C: Nominal capacitance (pF)	Char. X7R: 0.05 max. Char. X7S: 0.2 max.	Step   1   2	±2hrs. at room temperature, the Temperature (°C)  Min. Operating Temp. ±3  Room Temp.	Time (min) 30±3 3 max.		
	Cycle	Insulation Resistance	1,000MΩ, 50MΩ • μF min. (whice	chever is smaller)	3 4	Max. Operating Temp. ±3  Room Temp.	30±3 3 max.		
		Dielectric Strength (Between Terminals)	No defects or abnormalities		Pretreatment (for high dielectric constant type)     Perform a heat treatment at 150+0/-10°C for 1hi and then let sit at room temperature for 24±2hrs.				
		Appearance	No defects or abnormalities						
		Capacitance Change	Within ±5% or ±0.5pF (whichever is larger)	Char. X7R, X7S: Within ±12.5%		pacitor at 40±2°C and relative for 500 <sup>+24</sup> 0hrs.	humidity of		
14	Humidity (Steady State)	Q/D.F.	30pF min.: Q ≥ 350 10pF to 30pF: Q ≥ 275+5C/2 10pF max.: Q ≥ 200+10C C: Nominal capacitance (pF)	Char. X7R: 0.05 max. Char. X7S: 0.2 max.	Remove and set for 24±2hrs. at room temperature, then measure.  • Pretreatment (for high dielectric constant type) Perform a heat treatment at 150+0/-10°C for 1hr.,				
		Insulation Resistance	1,000MΩ, 50MΩ • μF min. (whic	hever is smaller)	and then to	et sit at room temperature for	24:21115.		
		Appearance	No defects or abnormalities		A t. la t. la	rated voltage for 500 <sup>±2</sup> 4hrs. a	+ 40 · 200 d		
		Capacitance Change	Within ±5% or ±0.5pF (whichever is larger)	Char. X7R, X7S: Within ±12.5%	in 90 to 95	rated voltage for 500 <sub>0</sub> nrs. a 5% humidity. nd set for 24±2hrs. at room tel			
15	Humidity Load	Q/D.F.	30pF min.: Q ≥ 200 30pF max.: Q ≥ 100+10C/3 C: Nominal capacitance (pF)	Char. X7R: 0.05 max. Char. X7S: 0.2 max.	then meas (Charge/D • Pretreatr		ant type)		
		Insulation Resistance	500MΩ or 25MΩ • μF min. (whic	chever is smaller)		et sit at room temperature for			

 $<sup>^{\</sup>star}$  "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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No.	Ite	m	Specifi	cations		Test Met	hod	
110.	100		Temperature Compensating Type	High Dielectric Constant Type		10301100		
		Appearance Capacitance	No defects or abnormalities  Within ±3% or ±0.3pF	Char. X7R, X7S:	Apply voltage in Table for 1000 <sup>±48</sup> <sub>6</sub> hrs. at the maximum operating temperature±3°C. Remove and set for 24±2hrs. at room temperature, then measure. (Charge/Discharge current ≤ 50mA)			
	High Temperature Load	Change	(whichever is larger)	Within ±12.5%	Temperature Compensating	Rated Voltage DC50V, DC100V, DC250V	150% of the rated voltage	
16		Q/D.F.	30pF min.: Q ≧ 350 10pF to 30pF: Q ≧ 275+5C/2 10pF max.: Q ≧ 200+10C C: Nominal capacitance (pF)	Char. X7R: 0.04 max. Char. X7S: 0.2 max.	Type  High Dielectric	DC630V, DC1kV DC25V, DC50V, DC100V, DC250V, DC500V	120% of the rated voltage 150% of the rated voltage	
			,	Constant Type	DC630V DC1kV	120% of the rated voltage 110% of the rated voltage		
		Insulation Resistance	1,000MΩ, 50MΩ • μF min. (which	Pretreatment (for high dielectric constant type)     Appy test voltage for 1hr. at test temperature.     Remove and set for 24±2hrs. at room temperature.				
		Appearance	No defects or abnormalities			,	mmersed, unagitated, in	
17	Solvent Resistance	Marking	Legible		reagent at 20 to 25°C for 30±5sec. and then remove gently. Marking on the surface of the capacitor should immediately be visually examined. Reagent:  • Isopropyl alcohol			

# Radial Lead Type Monolithic Ceramic Capacitors

■ RDE Series Large Capacitance and High Allowable Ripple Current (For General Use Only) (DC250V-DC630V)

#### **Features**

- 1. Higher capacitance with DC-Bias; approximately 40% higher than X7R under loaded rated voltage.
- 2. Meet LF (Lead Free) and HF (Halogen Free)
- 3. Allowable higher ripple current

area is smaller than a SMD.

Reduces acoustic noise
 Approximately 15dB reduction in comparison to leaded X7R characteristics parts.

 Approximately 30dB reduction in comparison to SMD X7R characteristics part because the contact

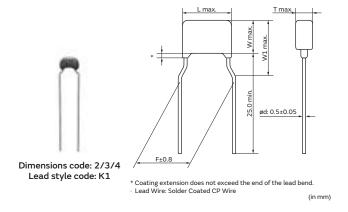
### **Applications**

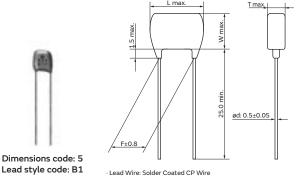
- 1. DC smoothing capacitor for LED bulb
- 2. PFC capacitor for general use SMPS
- 3. Replace Al-E capacitor for long-life equipment

#### **Dimensions**

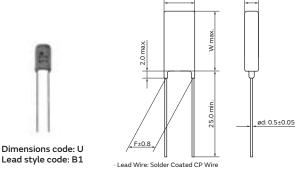
Dimensions and	DC Rated	Dimensions (mm)							
Lead Style Code	Voltage	L	w	W1	Т	F	d		
2K1/2M1	250V/450V/630V	5.5	4.0	6.0		5.0	0.5		
3K1/3M1	250V/450V/630V	5.5	5.0	7.5	See	5.0	0.5		
4K1/4M1	250V/450V/630V	7.5	5.5	8.0	the individual product	5.0	0.5		
5B1/5E1	250V/450V/630V	7.5	7.5*	-	specification	5.0	0.5		
UB1/UE1	250V/450V/630V	7.7	12.5*	-		5.0	0.5		

<sup>\*</sup>DC630V: W+0.5mm





(in mm)



# Marking

Rated Voltage Dimensions	DC250V	DC450V	DC630V				
Code Temp. Char.	Х7Т						
2	(F) 683 K47	(H 153)	(H 153 K77				
3, 8	(M) 334 K47	() 104 K97	© 223 K77				
5, U	(M) 225 M47	(M) 474 K97	(M) 474 M77				
Temperature Characteristics	Marked with code (X7T char.: 7)						
Nominal Capacitance	Marked with 3 figures						
Capacitance Tolerance	Marked with code						
Rated Voltage	Marked with code (DC250V: 4, DC450V: 9, DC630V: 7)						
Manufacturer's Identification	Marked with M						

# 

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDED72E333K2□□H03□	X7T (EIA)	250Vdc	33000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72E473K2□□H03□	X7T (EIA)	250Vdc	47000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72E683K2□□H03□	X7T (EIA)	250Vdc	68000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72E104K3□□H03□	X7T (EIA)	250Vdc	0.10µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72E154K3□□H03□	X7T (EIA)	250Vdc	0.15µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72E224K4□□H03□	X7T (EIA)	250Vdc	0.22µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDED72E334K4□□H03□	X7T (EIA)	250Vdc	0.33µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDED72E474K5□□H03□	X7T (EIA)	250Vdc	0.47µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72E684K5□□H03□	X7T (EIA)	250Vdc	0.68µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72E105K5□□H03□	X7T (EIA)	250Vdc	1.0µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72E225MU□□H03□	X7T (EIA)	250Vdc	2.2µF±20%	7.7×12.5	4.5	5.0	B1	E1
RDED72W103K2□□H03□	X7T (EIA)	450Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72W153K2□□H03□	X7T (EIA)	450Vdc	15000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72W223K2□□H03□	X7T (EIA)	450Vdc	22000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72W333K2□□H03□	X7T (EIA)	450Vdc	33000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72W473K2□□H03□	X7T (EIA)	450Vdc	47000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72W683K3□□H03□	X7T (EIA)	450Vdc	68000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72W104K3□□H03□	X7T (EIA)	450Vdc	0.10µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72W154K4□□H03□	X7T (EIA)	450Vdc	0.15µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDED72W224K5□□H03□	X7T (EIA)	450Vdc	0.22µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72W334K5□□H03□	X7T (EIA)	450Vdc	0.33µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72W474K5 H03	X7T (EIA)	450Vdc	0.47µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72W564K5□□H03□	X7T (EIA)	450Vdc	0.56µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72W105MU□□H03□	X7T (EIA)	450Vdc	1.0µF±20%	7.7×12.5	4.5	5.0	B1	E1
RDED72W125MU□□H03□	X7T (EIA)	450Vdc	1.2µF±20%	7.7×12.5	4.5	5.0	B1	E1
RDED72J103K2□□H03□	X7T (EIA)	630Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72J153K2□□H03□	X7T (EIA)	630Vdc	15000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72J223K3□□H03□	X7T (EIA)	630Vdc	22000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72J333K3□□H03□	X7T (EIA)	630Vdc	33000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72J473K3□□H03□	X7T (EIA)	630Vdc	47000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72J683K4□□H03□	X7T (EIA)	630Vdc	68000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RDED72J104K5□□H03□	X7T (EIA)	630Vdc	0.10µF±10%	7.5×8.0	4.5	5.0	B1	E1
RDED72J154K5□□H03□	X7T (EIA)	630Vdc	0.15µF±10%	7.5×8.0	4.5	5.0	B1	E1
RDED72J224K5□□H03□	X7T (EIA)	630Vdc	0.22µF±10%	7.5×8.0	4.5	5.0	B1	E1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDED72J274K5□□H03□	X7T (EIA)	630Vdc	0.27µF±10%	7.5×8.0	4.5	5.0	B1	E1
RDED72J474MU□□H03□	X7T (EIA)	630Vdc	0.47µF±20%	7.7×13.0	4.5	5.0	B1	E1
RDED72J564MU□□H03□	X7T (EIA)	630Vdc	0.56µF±20%	7.7×13.0	4.5	5.0	B1	E1

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code. The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

No.	lte	m	Specifications	Test Method
1	Operating Ten Range	nperature	-55 to +125°C	-
2	Appearance		No defects or abnormalities	Visual inspection
3	Dimension and	d Marking	See previous pages	Visual inspection, Vernier Caliper
		Between Terminals	No defects or abnormalities	The capacitor should not be damaged when voltage in Table is applied between the terminations for 1 to 5 sec. (Charge/Discharge current ≤ 50mA)  Rated Voltage Test Voltage  DC250V 200% of the rated voltage  DC450V 150% of the rated voltage  DC630V 120% of the rated voltage
4	Dielectric Strength	Body Insulation	No defects or abnormalities	The capacitor is placed in a container with metal balls of 1mm diameter so that each terminal, short-circuit, is kept approximately 2mm from the balls as shown in the figure, and 200% of the rated DC voltage is impressed for 1 to 5 sec between capacitor terminals and metal balls. (Charge/Discharge current ≤ 50mA)
5	Insulation Between Resistance Terminals		More than $10,000$ M $\Omega$ or $100$ M $\Omega$ • $\mu$ F, Whichever is smaller	The insulation resistance should be measured with DC500V (DC250V in case of rated voltage: DC250V,DC450V) at normal temperature and humidity and within 2min of charging. (Charge/Discharge current ≤ 50mA)
6	Capacitance		Within the specified tolerance	The capacitance/D.F. should be measured at the frequency of 1±0.1kHz and a voltage of
7	Dissipation Fa	ctor (D.F.)	0.01 max.	AC1±0.2V(r.m.s.).
8	Capacitance Temperature Characteristic	s	Within +22/-33%	The capacitance change should be measured after 5 min. at each specified temperature stage.           Step         Temperature (°C)           1         25±2           2         -55±3           3         25±2           4         125±3           5         25±2
9	Terminal Strength	Tensile Strength	Termination not to be broken or loosened	As in the figure, fix the capacitor body, apply the force gradually to each lead in the radial direction of the capacitor until reaching 10N and then keep the force applied for 10±1sec.
		Bending Strength	Termination not to be broken or loosened	Each lead wire should be subjected to a force of 2.5N and then bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3sec.
		Appearance	No defects or abnormalities	The capacitor should be firmly soldered to the
10	Vibration	Capacitance	Within the specified tolerance	supporting lead wire and vibrated at a frequency range of 10 to 55Hz, 1.5mm in total amplitude, with about a
10	Vibration		0.01 max.	1 minute rate of vibration change from 10Hz to 55Hz and back to 10Hz. Apply for a total of 6hrs., 2hrs. each in 3 mutually perpendicular directions.

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No.	lte	n	Specifications		Test Method						
11	Solderability o	f Leads	Lead wire should be soldered with uniform coating on the axial direction over 3/4 of the circumferential direction.	ethanol (JIS in weight pr Z-3282) for dipping is up body.	al of a capacitor is dipped 5-K-8101) and rosin (JIS- roportion) and then into n 2±0.5 sec. In both cases to to about 1.5 to 2mm fro der: 245±5°C Lead Free Sold 235±5°C H60A or H63A	K-5902) (25% rosin nolten solder (JIS- the depth of om the terminal ler (Sn-3.0Ag-0.5Cu)					
	Resistance to Soldering Heat (Non-Preheat)	Appearance	The measured and observed characteristics should satisfy the specifications in the following table.  No defects or abnormalities	solder 1.5 to	res should be immersed i o 2.0mm from the root of or 7.5+0/-1sec.						
12		Capacitance Change	Within ±10%		ent should be stored at 150+ at room temperature for						
1	Dielectric Strength (Between Terminals		No defects	initial measurement. Post-treatment Capacitor should be stored for 24±2hrs. at*room condition.							
	Resistance to		The measured and observed characteristics should satisfy the specifications in the following table.	First the cap 60+0/-5 se	pacitor should be stored a	at 120+0/-5°C for					
	(On-Preheat) Appearance Capacitance		No defects or abnormalities	solder 1.5 to	ad wires should be imme o 2.0mm from the root of a 7.5±0/-1500						
12		Change	Within ±10%	260±5°C for 7.5+0/-1sec. Pre-treatment Capacitor should be stored at 150+0/-10°C for							
2		Dielectric Strength (Between Terminals)	No defects	then place at room temperature for 2 initial measurement. Post-treatment Capacitor should be stored for 24±21 condition.		24±2hrs. before					
	Resistance to Soldering Hear (Soldering	Appearance	The measured and observed characteristics should satisfy the specifications in the following table.  No defects or abnormalities	- ·	ion ure of iron-tip: 350±10°C ime: 3.5±0.5sec.	:					
12	Iron Method)	Capacitance Change	Within ±10%		osition ad: 1.5 to 2.0mm from th d: 1.5 to 2.0mm from the						
3		Dielectric Strength (Between Terminals)	No defects	Pre-treatment Capacitor should be stored at 150+0/-10°C for 1hr then place at room temperature for 24±2hrs. before initial measurement. Post-treatment Capacitor should be stored for 24±2hrs. at* room condition.							
		Appearance	No defects or abnormalities	The capacit	or should be subjected to	5 temperature					
		Capacitance Change	Within ±12.5%	Step 1	Temperature (°C) -55±3	Time (min)					
	Temperature	D.F.	0.01 max.	2	Room Temp.	3 max.					
13	Cycle	Insulation Resistance	More than 1,000M $\Omega$ or 50M $\Omega$ • $\mu$ F (Whichever is smaller)	3 4	125±3 Room Temp.	30±3 3 max.					
		Dielectric Strength (Between Terminals)	No defects or abnormalities		ent eat treatment at 150+0, t sit at room temperature						
		Appearance	No defects or abnormalities	Set the cap	acitor at 40±2°C and rela	ative humidity of					
14	Humidity (Steady	Capacitance Change	Within ±12.5%		for 500 <sup>±2</sup> 6 <sup>4</sup> hrs. Remove a room temperature, then						
14	State)	D.F.	0.02 max.	• Pretreatm							
		Insulation Resistance	More than 1,000M $\Omega$ or 50M $\Omega$ • $\mu$ F (Whichever is smaller)		eat treatment at 150+0/ t sit at room temperature						
		Appearance	No defects or abnormalities		ated voltage at 40±2°C at						
	Humidity	Capacitance Change	Within ±12.5%	for 24±2hrs	90 to 95% for 500 <sup>±24</sup> hr s. at room temperature, tl scharge current ≦ 50mA)						
15	Load	D.F.	0.02 max.	` •	,						
	Load D.F.  Insulation Resistance		More than $500M\Omega$ or $25M\Omega$ • $\mu F$ (Whichever is smaller)		ent eat treatment at 150+0, t sit at room temperature						

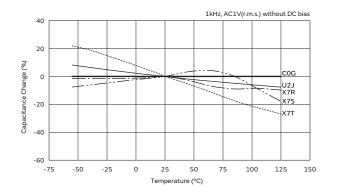
 $<sup>\</sup>star$  "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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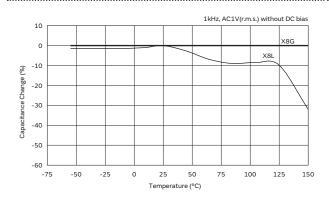
No.	Ite	n	Specifications		Test Method			
		Appearance	No defects or abnormalities	Apply voltage in Table for 1000 <sup>+48</sup> <sub>O</sub> hrs. at the				
		Capacitance Change	Within ±12.5%	maximum operating temperature. Remove and set for 24±2hrs. at room temperature, then measure. (Charge/Discharge current ≤ 50mA)				
		D.F.	0.02 max.	Rated Voltage Test Voltage				
16	High Temperature Load	Insulation Resistance		DC250V	150% of the rated voltage			
10				DC450V	130% of the rated voltage			
				DC630V	120% of the rated voltage			
			More than 1,000M $\Omega$ or 50M $\Omega$ • $\mu F$ (Whichever is smaller)	• Pretreatment Apply test voltage for 1hr., at test temperature. Remove and set for 24±2hrs. at room temperature.				
		Appearance	No defects or abnormalities	The capacitor should	be fully immersed, unagitated, in			
17	Solvent Resistance	Marking	Legible	reagent at 20 to 25°C for 30±5 sec. and then removed gently. Marking on the surface of the capacitor should immediately be visually examined.  Reagent:  Isopropyl alcohol				

# Characteristics Reference Data (Typical Example)

# Capacitance - Temperature Characteristics (RCE, RDE Series)

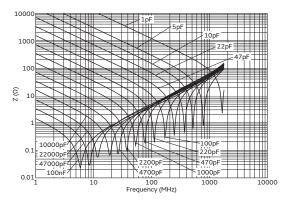


# Capacitance - Temperature Characteristics (RHE Series)

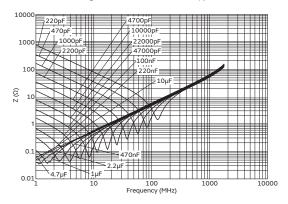


# Impedance - Frequency Characteristics

Temperature Compensating Type



High Dielectric Constant Type



# **Packaging**

### **Packaging**

Two types of packaging for monolithic ceramic capacitors are available.

#### 1. Bulk Packaging

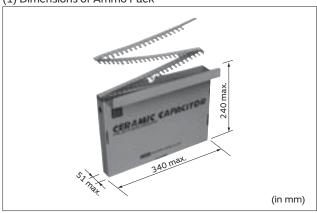
Minimum Quantity

Dimensions Code	Dimensions (L×W)	Minimum Quantity (pcs./Bag)*
0	3.6×3.5mm or 4.0×3.5mm or 5.0×3.5mm (Depends on Part Number)	
1	4.0×3.5mm or 4.5×3.5mm or 5.0×3.5mm (Depends on Part Number)	
2	5.5×4.0mm	
3	5.5×5.0mm	500
4	7.5×5.5mm	
5	7.5×7.5mm or 7.5×8.0mm (Depends on Part Number)	
W	5.5×7.5mm	
U	7.7×12.5mm or 7.7×13.0mm (Depends on Part Number)	200

Please order with an integral multiple of the minimum quantity above.

### 2. Tape Carrier Packaging

(1) Dimensions of Ammo Pack



### (2) Minimum Quantity

Dimensions Code	Dimensions (L×W)	Minimum Quantity (pcs./Ammo Pack)*		
0	3.6×3.5mm or 4.0×3.5mm or 5.0×3.5mm (Depends on Part Number)			
1	4.0×3.5mm or 4.5×3.5mm or 5.0×3.5mm (Depends on Part Number)	2000		
2	5.5×4.0mm			
3	5.5×5.0mm	2000 - 1500		
4	7.5×5.5mm	2000 or 1500		
5	7.5×7.5mm or 7.5×8.0mm (Depends on Part Number)			
W	5.5×7.5mm	1500 or 1000		
U	7.7×12.5mm or 7.7×13.0mm (Depends on Part Number)			

Please order with an integral multiple of the minimum quantity above.

"Minimum Quantity" means the numbers of units of each delivery or order. The quantity should be an integral multiple of the "minimum quantity." (Please note that the actual delivery quantity in a package may change sometimes.)

<sup>\*</sup>Minimum Quantity may change depends on part number.

Please check our website "Product details"

 $<sup>{\</sup>rm *Minimum\ Quantity\ may\ change\ depends\ on\ part\ number}.$ 

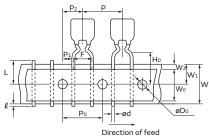
Please check our website "Product details"

# **Packaging**

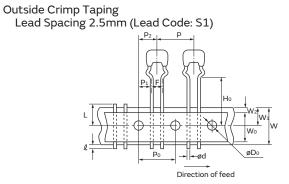
Continued from the preceding page.

**Taping Dimensions** 

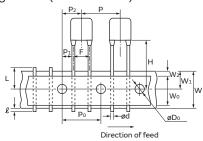
Inside Crimp Taping Lead Spacing 5.0mm (Lead Code: M1)

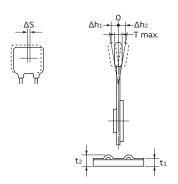


Direction



Straight Taping Lead Spacing 2.5mm (Lead Code: DB) Lead Spacing 5.0mm (Lead Code: E1)





ltem	Code	Dimensions (mm)		
Pitch of Component	Р	12.7±1.0		
Pitch of Sprocket Hole	Po	12.7±0.2		
	F	2.5 <sup>+0.4</sup> <sub>-0.2</sub> (DB) (S1)		
Lead Spacing		5.0 <sup>+0.6</sup> <sub>-0.2</sub> (E1) (M1)		
Length from Hole Center to Component Center	P <sub>2</sub>	6.35±1.3		
	D.	3.85±0.7 (E1) (M1)		
Length from Hole Center to Lead	P1	5.1±0.7 (DB) (S1)		
	254±1.5 Total length of components pitch × 20			
Body Dimension		Depends on Part Number		
Deviation Along Tape, Left or Right Defect	ΔS	±2.0		
Carrier Tape Width	W	18.0±0.5		
Position of Sprocket Hole	W <sub>1</sub>	9.0+0		
Lead Distance between Reference and Bottom Plane	Ho	16.0±0.5 (M1) (S1)		
For Straight Lead Type	Н	17.5±0.5 (E1),16±0.5 (DB)		
Diameter of Sprocket Hole	Do	4.0±0.1		
Lead Diameter	d	0.5±0.05		
Total Tape Thickness	t <sub>1</sub>	0.6±0.3		
Total Thickness of Tape and Lead Wire	t2	1.5 max.		
Body Thickness	Т	Depends on Part Number		
Deviation Across Tape	Δh1 Δh2	1.0 max. (Dimensions code W, U: 2.0 max.)		
Portion to Cut in Case of Defect	L	11.0 +0 -1.0		
Protrusion Length	l	0.5 max.		
Hold Down Tape Width	Wo	9.5 min.		
Hold Down Tape Position	W <sub>2</sub>	1.5±1.5		
Coating Extension	Depends on Dimensions			

# **!\Caution**

### **(Caution (Storage and Operating Condition)**

Operating and storage environment

The insulating coating of capacitors does not form a perfect seal; therefore, do not use or store capacitors in a corrosive atmosphere, especially where chloride gas, sulfide gas, acid, alkali, salt or the like are present. Also avoid exposure to moisture. Before cleaning, bonding or molding this product, verify that these processes do not affect product quality by testing the performance of a cleaned, bonded or molded product in the intended

equipment. Store the capacitors where the temperature and relative humidity do not exceed 5 to 40 degrees centigrade and 20 to 70%.
Use capacitors within 6 months after delivery.

FAILURE TO FOLLOW THE ABOVE CAUTIONS MAY RESULT, WORST CASE, IN A SHORT CIRCUIT AND CAUSE FUMING OR PARTIAL DISPERSION WHEN THE PRODUCT IS USED.

### **∴**Caution (Rating)

#### 1. Operating Voltage

When DC-rated capacitors are to be used in AC or ripple current circuits, be sure to maintain the Vp-p value of the applied voltage or the V0-p which contains DC bias within the rated voltage range.

When the voltage is applied to the circuit, starting or stopping may generate irregular voltage for a transit period because of resonance or switching. Be sure to use a capacitor with a rated voltage range that includes these irregular voltages.

When DC-rated capacitors are to be used in input circuits from commercial power source (AC filter), be sure to use Safety Recognized Capacitors because various regulations on withstand voltage or impulse withstand established for all equipment should be taken into consideration.

Voltage	DC Voltage	DC+AC Voltage	AC Voltage	Pulse Voltage (1)	Pulse Voltage (2)
Positional Measurement	Vo-p	Vo-p	Vp-p	Vp-p	Vp-p

#### 2. Operating Temperature

Keep the surface temperature of a capacitor below the upper limit of its rated operating temperature range. Be sure to take into account the heat generated by the capacitor itself (Please refer to the following column 3) and by peripheral components.

#### 3. Self-generated Heat

When the capacitor is used in a high-frequency current, pulse current or similar current, it may have self-generated heat due to dielectric loss. In the case of "High Dielectric Constant Type Capacitors", applied voltage load should be such that self-generated heat is within 20 °C under the condition where the capacitor is subjected at an atmosphere temperature of 25 °C. Excessive heat may lead to deterioration of the capacitor's characteristics and reliability. Please contact us if self-generated heat occurs with "Temperature Compensating Type Capacitors".

### 4. Measurement of Temperature

The surface temperature of capacitor should be measured under the condition where an atmosphere

temperature and a heat from peripheral components are stable.

The self-generated heat should be measured under the conditions where the capacitor is subjected at an atmosphere temperature 25°C and is not affected by radiant heat from other components or wind from surroundings.

When measuring, use a thermocouple of small thermal capacity -K of ø0.1mm.

Never attempt to perform measurement with the cooling fan running. Otherwise, accurate measurement cannot be ensured.

#### 5. Fail-Safe

Be sure to provide an appropriate fail-safe function on your product to prevent a second damage that may be caused by the abnormal function or the failure of our product.

FAILURE TO FOLLOW THE ABOVE CAUTIONS MAY RESULT, WORST CASE, IN A SHORT CIRCUIT AND CAUSE FUMING OR PARTIAL DISPERSION WHEN THE PRODUCT IS USED.

# **!**Caution

### **(Caution (Soldering and Mounting)**

#### 1. Vibration and impact

Do not expose a capacitor or its leads to excessive shock or vibration during use.

#### 2. Soldering

When soldering this product to a PCB/PWB, do not exceed the solder heat resistance specification of the capacitor. Subjecting this product to excessive heating could melt the internal junction solder and may result in thermal shocks that can crack the ceramic element.

### 3. Bonding, resin molding and coating

In case of bonding, molding or coating this product, verify that these processes do not affect the quality of the capacitor by testing the performance of the bonded, molded or coated product in the intended equipment.

In case the amount of application, dryness/ hardening conditions of adhesives and molding resins containing organic solvents (ethyl acetate, methyl ethyl ketone, toluene, etc.) are unsuitable, the outer coating resin of a capacitor may be damaged by the organic solvents and may result, worst case, in a short circuit.

The variation in thickness of adhesive or molding resin or coating may cause an outer coating resin cracking and/or ceramic element cracking of a capacitor in a temperature cycling.

4. Treatment after bonding, resin molding and coating When the outer coating is hot (over 100 degrees centigrade) after soldering, it becomes soft and fragile, so please be careful not to give it mechanical stress.

FAILURE TO FOLLOW THE ABOVE CAUTIONS MAY RESULT, WORST CASE, IN A SHORT CIRCUIT AND CAUSE FUMING OR PARTIAL DISPERSION WHEN THE PRODUCT IS USED.

# **Caution (Handling)**

Vibration and impact

Do not expose a capacitor or its leads to excessive shock or vibration during use.

FAILURE TO FOLLOW THE ABOVE CAUTIONS MAY RESULT, WORST CASE, IN A SHORT CIRCUIT AND CAUSE FUMING OR PARTIAL DISPERSION WHEN THE PRODUCT IS USED.

# **Notice**

### Notice (Rating)

Capacitance change of capacitor
In case of X7R/X7S/X7T/X8L char.
Capacitors have an aging characteristic, whereby

Capacitors have an aging characteristic, whereby the capacitor continually decreases its capacitance slightly if the capacitor is left on for a long time. Moreover, capacitance might change greatly depending on the surrounding temperature or an applied voltage.

### Notice (Soldering and Mounting)

# 1. Cleaning (ultrasonic cleaning)

To perform ultrasonic cleaning, observe the following conditions.

Rinse bath capacity: Output of 20 watts per liter or less.

Rinsing time: 5 min. maximum.

Do not vibrate the PCB/PWB directly.

Excessive ultrasonic cleaning may lead to fatigue

destruction of the lead wires.

#### 2. Soldering and Mounting

Insertion of the Lead Wire

- When soldering, insert the lead wire into the PCB without mechanically stressing the lead wire.
- Insert the lead wire into the PCB with a distance appropriate to the lead space.

# Global Locations

For details please visit www.murata.com



#### **Note**

# 1 Export Control

#### For customers outside Japan:

No Murata products should be used or sold, through any channels, for use in the design, development, production, utilization, maintenance or operation of, or otherwise contribution to (1) any weapons (Weapons of Mass Destruction [nuclear, chemical or biological weapons or missiles] or conventional weapons) or (2) goods or systems specially designed or intended for military end-use or utilization by military end-users.

#### For customers in Japan:

For products which are controlled items subject to the "Foreign Exchange and Foreign Trade Law" of Japan, the export license specified by the law is required for export.

- 2 Please contact our sales representatives or product engineers before using the products in this catalog for the applications listed below, which require especially high reliability for the prevention of defects which might directly damage a third party's life, body or property, or when one of our products is intended for use in applications other than those specified in this catalog.
  - Aircraft equipment
  - Aerospace equipment
  - 3 Undersea equipment
  - Power plant equipment
  - Medical equipment
  - Transportation equipment (vehicles, trains, ships, etc.)
  - Traffic signal equipment
  - 8 Disaster prevention / crime prevention equipment
  - Data-processing equipment
  - Application of similar complexity and/or reliability requirements to the applications listed above

- 3 Product specifications in this catalog are as of August 2016. They are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering. If there are any questions, please contact our sales representatives or product engineers.
- 4 Please read rating and &CAUTION (for storage, operating, rating, soldering, mounting and handling) in this catalog to prevent smoking and/or burning, etc.
- 5 This catalog has only typical specifications.
  Therefore, please approve our product
  specifications or transact the approval sheet
  for product specifications before ordering.
- Please note that unless otherwise specified, we shall assume no responsibility whatsoever for any conflict or dispute that may occur in connection with the effect of our and/or a third party's intellectual property rights and other related rights in consideration of your use of our products and/or information described or contained in our catalogs. In this connection, no representation shall be made to the effect that any third parties are authorized to use the rights mentioned above under licenses without our consent.
- 7 No ozone depleting substances (ODS) under the Montreal Protocol are used in our manufacturing process.

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