

R76 Series Double Metallized Polypropylene Film, Radial, DC and Pulse Applications (Automotive Grade)

Overview

The R76 Series is constructed of polypropylene film and double metallized polyester film as electrodes with radial leads of tinned wire. The radial leads are electrically welded to the metal layer on the ends of the capacitor winding. The capacitor is encapsulated in a self-extinguishing solvent resistant plastic case with thermosetting resin material meeting the UL 94V-0 requirements. Two different winding constructions are used depending on voltage parameters. Please see the Performance Characteristics for more information.

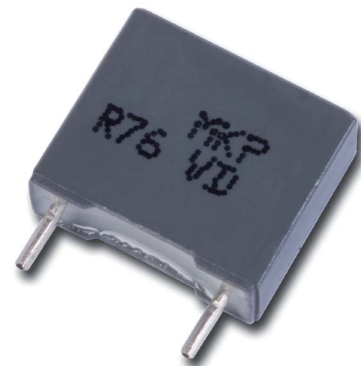
Automotive grade devices are available (up to lead spacing 22.5 mm) and meet the demanding Automotive Electronics Council's AEC-Q200 qualification requirements.

Applications

Typical applications include deflection circuits in televisions (S-correction and flyback tuning) and monitors, switching spikes suppression in switched mode power supplies (SMPS), lamp capacitors for electronic ballasts and compact lamps, and snubber and silicon-controlled rectifier (SCR) commutation circuits as well as applications with high voltage and high current. Not suitable for across-the-line application (see Suppressor Capacitors).

Benefits

- Voltage range: 250 – 2,000 VDC
- Capacitance range: 100 pF – 15 μ F
- Lead Spacing: 7.5 mm – 37.5 mm
- Capacitance tolerance: \pm 5%, \pm 10%, \pm 20%
- Climatic category: 55/105/56 IEC 60068-1
- Operating temperature range of -55°C to +105°C
- RoHS compliance and lead-free terminations
- Tape and reel packaging in accordance with IEC 60286-2
- Self-healing
- Automotive (AEC-Q200) grades available up to lead spacing 22.5mm



Part Number System

R76	I	D	1680	AA	00	H
Series	Rated Voltage (VDC)	Lead Spacing (mm)	Capacitance Code (pF)	Lead and Packaging Code	Internal Use	Capacitance Tolerance
Metallized Polypropylene	I = 250 M = 400 P = 630 Q = 1000 T = 1600 U = 2000	D = 7.5 F = 10.0 I = 15.0 N = 22.5 R = 27.5 W = 37.5	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	See Ordering Options Table	00, 30, 40, 70 (Standard)	H = \pm 2.5% (for C \geq 0.001 μ F only) J = \pm 5% K = \pm 10%

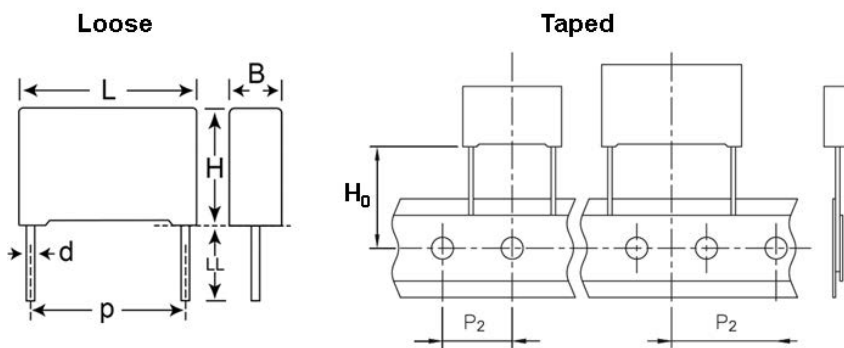
Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
7.5	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	SE
	Ammo Pack	$H_0 = 18.5 \pm 0.5$	DQ
	Other Lead and Packaging Options		
	Tape & Reel (Standard Reel)	$H_0 = 18.5 \pm 0.5$	CK
	Bulk (Bag)–Short Leads	2.7 +0.5/-0	JA
	Bulk (Bag)–Short Leads	3.5 +0.5/-0	JB
	Bulk (Bag)–Short Leads	10 +/- 1	JC
	Bulk (Bag)–Short Leads	4.0 +0.5/-0	JE
	Bulk (Bag)–Short Leads	3.2 +0.3/-0.2	JH
	Bulk (Bag)–Long Leads	18 +1/-1	JM
	Bulk (Bag)–Long Leads	17 +1/-2	Z3
	Bulk (Bag)–Long Leads	30 +5/-0	40
	Bulk (Bag)–Long Leads	25 +2/-1	50
10 15 22.5	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	SE
	Ammo Pack	$H_0 = 18.5 \pm 0.5$	DQ
	Other Lead and Packaging Options		
	Tape & Reel (Standard Reel)	$H_0 = 18.5 \pm 0.5$	GY
	Tape & Reel (Large Reel)	$H_0 = 18.5 \pm 0.5$	CK
	Bulk (Bag)–Short Leads	2.7 +0.5/-0	JA
	Bulk (Bag)–Short Leads	3.5 +0.5/-0	JB
	Bulk (Bag)–Short Leads	10 +/- 1	JC
	Bulk (Bag)–Short Leads	4.0 +0.5/-0	JE
	Bulk (Bag)–Short Leads	3.2 +0.3/-0.2	JH
	Bulk (Bag)–Long Leads	18 +1/-1	JM
	Bulk (Bag)–Long Leads	30 +5/-0	40
	Bulk (Bag)–Long Leads	25 +2/-1	50
27.5	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	SE
	Other Lead and Packaging Options		
	Tape & Reel (Large Reel)	$H_0 = 18.5 \pm 0.5$	CK
	Bulk (Bag)–Short Leads	3.5 +0.5/-0	JB
	Bulk (Bag)–Short Leads	4.0 +0.5/-0	JE
	Bulk (Bag)–Short Leads	3.2 +0.3/-0.2	JH
	Bulk (Bag)–Long Leads	30 +5/-0	40
Bulk (Bag) – Long Leads	25 +2/-1	50	

Ordering Options Table cont'd

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
37.5	Standard Lead and Packaging Options		
	Bulk (Bag)–Short Leads	4 +2/-0	SE
	Other Lead and Packaging Options		
	Bulk (Bag)–Short Leads	3.5 +0.5/-0	JB
	Bulk (Bag)–Short Leads	4.0 +0.5/-0	JE
	Bulk (Bag)–Short Leads	3.2 +0.3/-0.2	JH
	Bulk (Bag)–Long Leads	30 +5/-0	40
	Bulk (Bag) – Long Leads	25 +2/-1	50

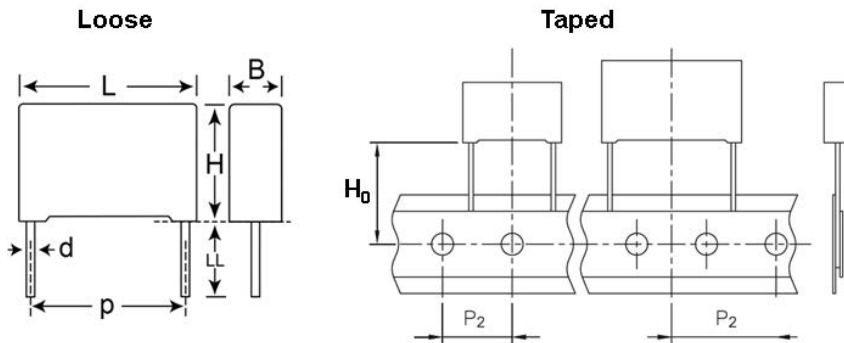
Dimensions – Millimeters



p		B		H		L		d	
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
7.5	+/- 0.4	3.0	+0.1	8.0	+0.1	10.0	+0.2	0.5	+/- 0.05
7.5	+/- 0.4	4.0	+0.1	9.0	+0.1	10.0	+0.2	0.6	+/- 0.05
7.5	+/- 0.4	5.0	+0.1	10.5	+0.1	10.0	+0.2	0.6	+/- 0.05
7.5	+/- 0.4	6.0	+0.1	12.0	+0.1	10.0	+0.2	0.6	+/- 0.05
10.0	+/- 0.4	4.0	+0.2	9.0	+0.1	13.0	+0.2	0.6	+/- 0.05
10.0	+/- 0.4	5.0	+0.2	11.0	+0.1	13.0	+0.2	0.6	+/- 0.05
10.0	+/- 0.4	6.0	+0.2	12.0	+0.1	13.0	+0.2	0.6	+/- 0.05
15.0	+/- 0.4	4.0	+0.2	10.0	+0.1	18.0	+0.3	0.8	+/- 0.05
15.0	+/- 0.4	5.0	+0.2	11.0	+0.1	18.0	+0.3	0.8	+/- 0.05
15.0	+/- 0.4	6.0	+0.2	12.0	+0.1	18.0	+0.3	0.8	+/- 0.05
15.0	+/- 0.4	7.5	+0.2	13.5	+0.1	18.0	+0.5	0.8	+/- 0.05
15.0	+/- 0.4	8.5	+0.2	14.5	+0.1	18.0	+0.5	0.8	+/- 0.05
15.0	+/- 0.4	9.0	+0.2	12.5	+0.1	18.0	+0.5	0.8	+/- 0.05
15.0	+/- 0.4	10.0	+0.2	16.0	+0.1	18.0	+0.5	0.8	+/- 0.05

Note: See Ordering Options Table for lead length (LL/Ho) options.

Dimensions – Millimeters cont'd



p		B		H		L		d	
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
15.0	+/- 0.4	11.0	+0.2	19.0	+0.1	18.0	+0.5	0.8	+/- 0.05
15.0	+/- 0.4	13.0	+0.2	12.0	+0.1	18.0	+0.5	0.8	+/- 0.05
22.5	+/- 0.4	6.0	+0.2	15.0	+0.1	26.5	+0.3	0.8	+/- 0.05
22.5	+/- 0.4	7.0	+0.2	16.0	+0.1	26.5	+0.3	0.8	+/- 0.05
22.5	+/- 0.4	8.5	+0.2	17.0	+0.1	26.5	+0.3	0.8	+/- 0.05
22.5	+/- 0.4	10.0	+0.2	18.5	+0.1	26.5	+0.3	0.8	+/- 0.05
22.5	+/- 0.4	11.0	+0.2	20.0	+0.1	26.5	+0.3	0.8	+/- 0.05
22.5	+/- 0.4	13.0	+0.2	22.0	+0.1	26.5	+0.3	0.8	+/- 0.05
27.5	+/- 0.4	9.0	+0.2	17.0	+0.1	32.0	+0.3	0.8	+/- 0.05
27.5	+/- 0.4	11.0	+0.2	20.0	+0.1	32.0	+0.3	0.8	+/- 0.05
27.5	+/- 0.4	13.0	+0.2	22.0	+0.1	32.0	+0.3	0.8	+/- 0.05
27.5	+/- 0.4	13.0	+0.2	25.0	+0.1	32.0	+0.3	0.8	+/- 0.05
27.5	+/- 0.4	14.0	+0.2	28.0	+0.1	32.0	+0.3	0.8	+/- 0.05
27.5	+/- 0.4	18.0	+0.2	33.0	+0.1	32.0	+0.3	0.8	+/- 0.05
27.5	+/- 0.4	22.0	+0.2	37.0	+0.1	32.0	+0.3	0.8	+/- 0.05
37.5	+/- 0.4	11.0	+0.3	22.0	+0.1	41.5	+0.3	1.0	+/- 0.05
37.5	+/- 0.4	13.0	+0.3	24.0	+0.1	41.5	+0.3	1.0	+/- 0.05
37.5	+/- 0.4	16.0	+0.3	28.5	+0.1	41.5	+0.3	1.0	+/- 0.05
37.5	+/- 0.4	19.0	+0.3	32.0	+0.1	41.5	+0.3	1.0	+/- 0.05
37.5	+/- 0.4	20.0	+0.3	40.0	+0.1	41.5	+0.3	1.0	+/- 0.05
37.5	+/- 0.4	24.0	+0.3	44.0	+0.1	41.5	+0.3	1.0	+/- 0.05
37.5	+/- 0.4	30.0	+0.3	45.0	+0.1	41.5	+0.3	1.0	+/- 0.05

Note: See Ordering Options Table for lead length (LL/Ho) options.

Performance Characteristic

Dielectric	Polypropylene film							
Plates	Double sided metallized polyester film							
Winding	Non-inductive type							
Leads	Tinned wire							
Protection	Plastic case, thermosetting resin filled. Box material is solvent resistant and flame retardant according to UL94.							
Related Documents	IEC 60384-16							
Sections	1				2			
Voltage Range (VDC)	250	400	630	630	1000	1000	1600	2000
Voltage Range (VAC)	180	250	250	400	400	600	650	700
Capacitance Range (μF)	0.0068 – 15	0.0027 – 8.2	0.00068 – 0.012	0.00039 – 5.6	0.00022 – 0.0033	0.00047 – 2.2	0.0033 – 1.2	0.0001 – 0.68
Capacitance Values	E12 series (IEC 60063) measured @ 1 kHz and +20 \pm 1°C							
Capacitance Tolerance	\pm 2.5%, \pm 5%, \pm 10%							
Operating Temperature Range	-55°C to +105°C							
Rated Temperature T_R	+85°C for V_R (DC) +75°C for V_R (AC)							
Voltage Derating	The following decreasing factor has to be applied on the rated voltage: +85°C to +105°C: 1.25% per °C for V_R (DC) +75°C to +105°C: 1.35% per °C for V_R (AC)							
Climatic Category	55/105/56 IEC 60068-1							
	Average relative humidity \leq 75%							
	RH = 95% for 30 days per year							
	RH = 85% for further days limited by average value per year							
Test Voltage	1.6 x V_R VDC for 2 seconds (between terminations) @ +25°C \pm 5°C							
Capacitance Drift	Maximum 0.5% after a 2 year storage period at a temperature of +10°C to +40°C and a relative humidity of 40% to 60%							
Maximum Pulse Steepness	dV/dt according to Table 1. For peak to peak voltages lower than rated voltage ($V_{pp} < V_R$), the specified dv/dt can be multiplied by the factor V_R/V_{pp}							
Temperature Coefficient	-(200 \pm 100) ppm/°C at 1 kHz							
Self-Inductance L (Lead Length ~ 2 mm)	Lead Spacing (mm)	7.5	10	15	22.5	27.5	37.5	
	L (nH) \approx	8	9	10	18	18	20	
Dissipation Factor $\tan\delta$	Measured at 25°C \pm 5°C							
	Frequency	$C \leq 0.1 \mu\text{F}$		$0.1 \mu\text{F} < C \leq 1.0 \mu\text{F}$		$1.0 \mu\text{F} < C \leq 4.7 \mu\text{F}$		$C > 1 \mu\text{F}$
	1 kHz	0.04%		0.05%		0.06%		0.10%
	10 kHz	0.06%		0.08%		-		-
100 kHz	0.25%		-		-		-	

Performance Characteristics cont'd

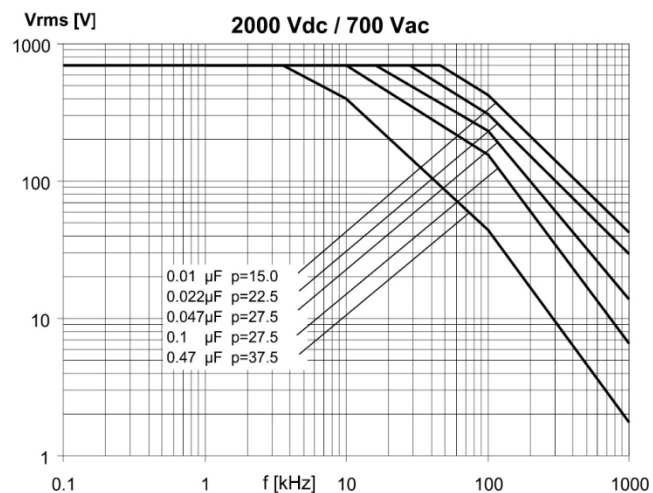
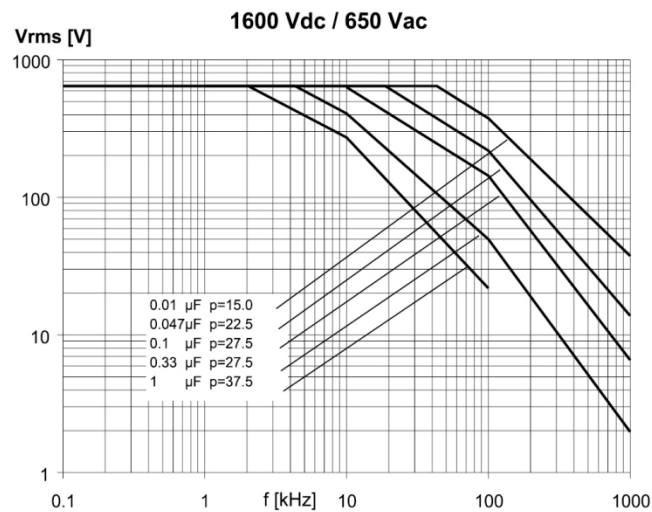
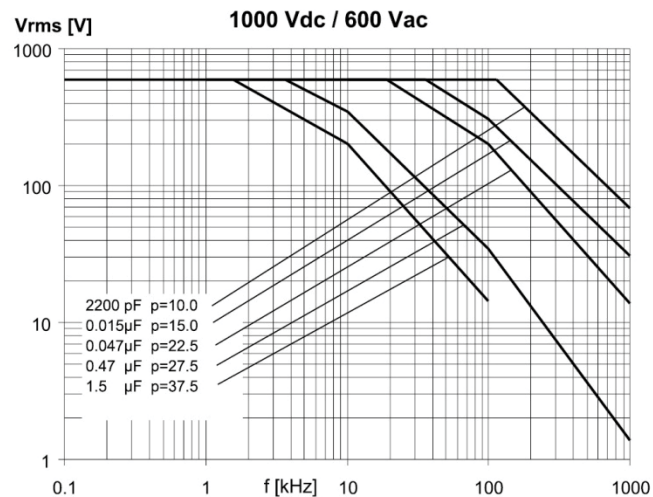
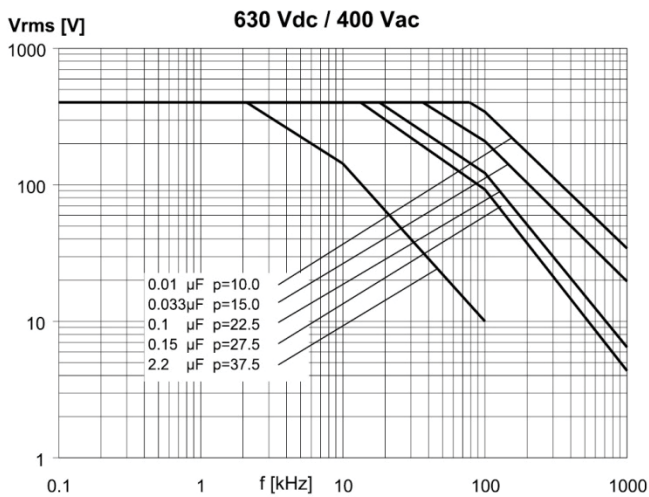
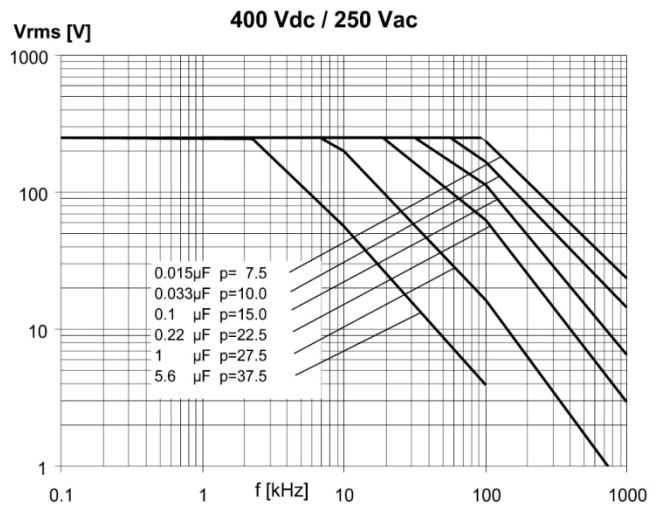
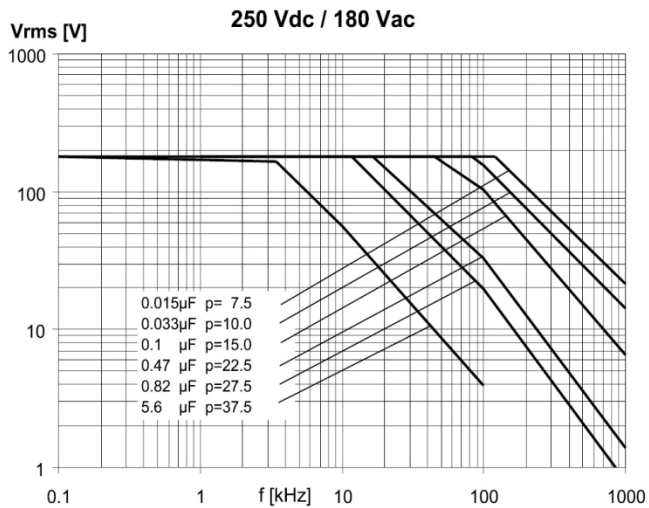
Insulation Resistance	Measured at +25°C, 100 VDC 60 seconds	
	Minimum Values Between Terminals	
	C ≤ 0.33 μF	C > 0.33 μF
	≥ 100,000 MΩ (≥ 500,000 MΩ) *	≥ 30,000 MΩ • μF (≥ 150,000 MΩ • μF) *

* typical value

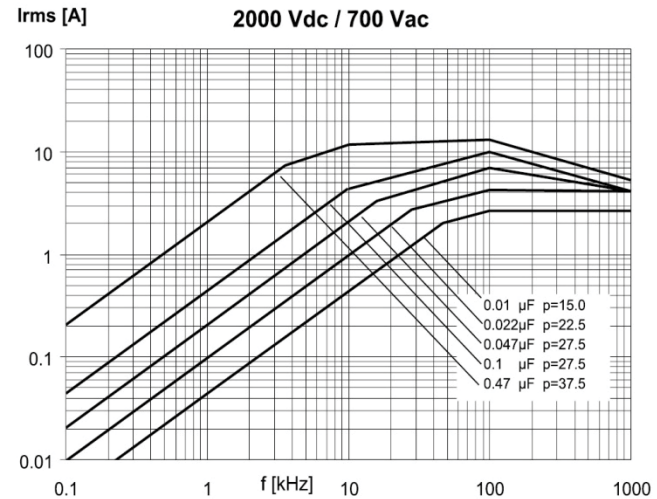
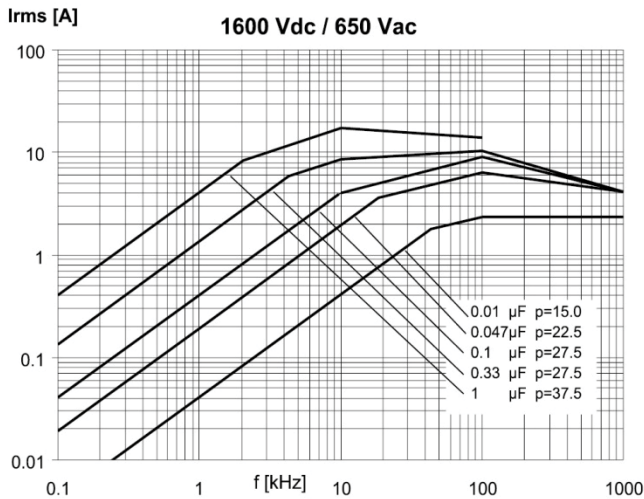
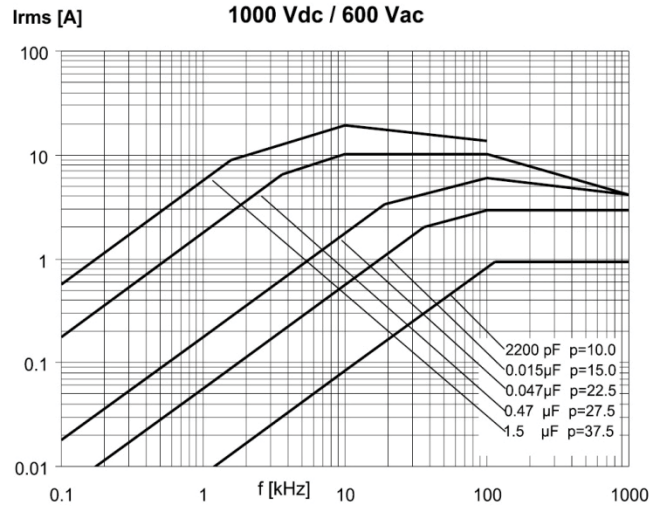
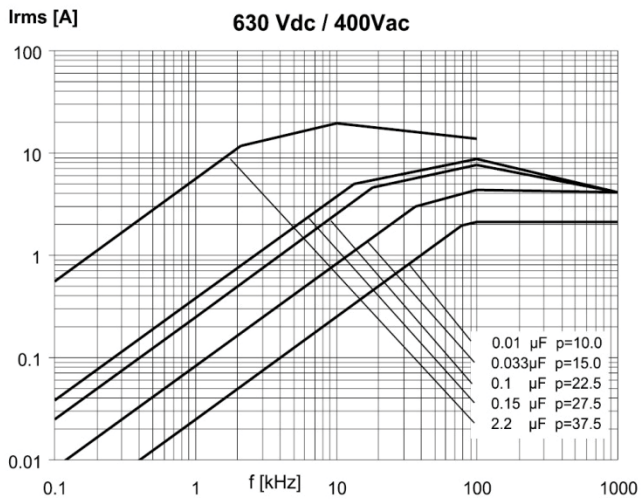
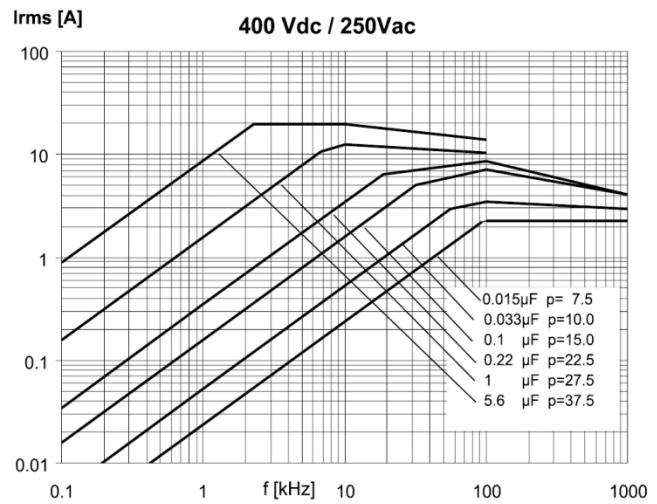
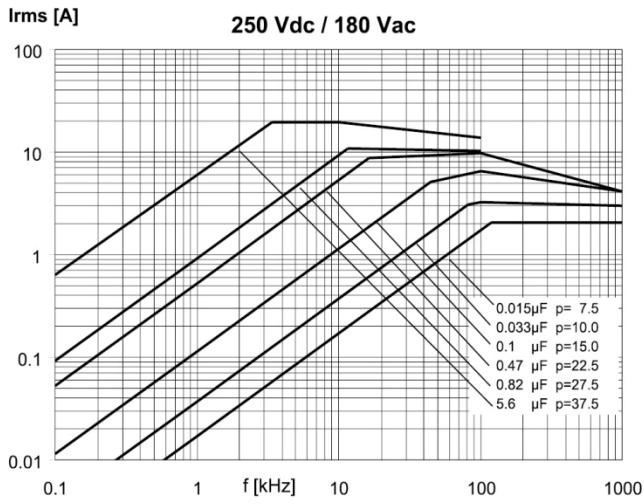
Qualification

Automotive Grade products meet or exceed the requirements outlined by the Automotive Electronics Council. Details regarding test methods and conditions are referenced in document AEC-Q200, Stress Test Qualification for Passive Components. For additional information regarding the Automotive Electronics Council and AEC-Q200, please visit their website at www.aecouncil.com.

Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/Th $\leq 40^{\circ}\text{C}$)



Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/ $T_h \leq 40^\circ\text{C}$)



Note: p (pitch) in mm.

Environmental Test Data

Damp Heat, Steady State Test	Test Conditions:		Performances
	Temperature: Relative humidity (RH): Test duration:	+40°C ± 2°C 93% ± 2% 56 days	$ \Delta C/C \leq 2\%$, $\Delta \tan\delta \leq 0.001 @ 1 \text{ kHz}$ IR after test $\geq 50\%$ of initial limit
Endurance Test	Test Conditions		Performances
	Temperature: Voltage applied: Test duration:	+85°C ± 2°C 1.25 x V _R (DC) 2,000 hours	$ \Delta C/C \leq 2\%$, $\Delta \tan\delta \leq 0.001 @ 10 \text{ kHz for } C \leq 1\mu\text{F}$ $\Delta \tan\delta \leq 0.001 @ 1 \text{ kHz for } C > 1\mu\text{F}$ IR after test $\geq 50\%$ of initial limit
Resistance to Soldering Heat Test	Test Conditions		Performances
	Solder bath temperature: Dipping time (with heat screen):	260°C ± 5°C 10 seconds ± 1 second	$ \Delta C/C \leq 1\%$, $\Delta \tan\delta \leq 0.001 @ 10 \text{ kHz for } C \leq 1\mu\text{F}$ $\Delta \tan\delta \leq 0.001 @ 1 \text{ kHz for } C > 1\mu\text{F}$ IR after test \geq initial limit

Environmental Compliance

All KEMET pulse capacitors are RoHS Compliant.



RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Capacitance Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
250	180	0.0068	3.0	8.0	10.0	7.5	1,100	550,000	76ID1680(1)30(2)	R76ID1680(1)30(2)
250	180	0.0082	3.0	8.0	10.0	7.5	1,100	550,000	76ID1820(1)30(2)	R76ID1820(1)30(2)
250	180	0.010	3.0	8.0	10.0	7.5	1,100	550,000	76ID2100(1)30(2)	R76ID2100(1)30(2)
250	180	0.012	4.0	9.0	10.0	7.5	1,100	550,000	76ID2120(1)40(2)	R76ID2120(1)40(2)
250	180	0.015	4.0	9.0	10.0	7.5	1,100	550,000	76ID2150(1)40(2)	R76ID2150(1)40(2)
250	180	0.018	4.0	9.0	10.0	7.5	1,100	550,000	76ID2180(1)40(2)	R76ID2180(1)40(2)
250	180	0.022	4.0	9.0	10.0	7.5	1,100	550,000	76ID2220(1)40(2)	R76ID2220(1)40(2)
250	180	0.027	5.0	10.5	10.0	7.5	1,100	550,000	76ID2270(1)40(2)	R76ID2270(1)40(2)
250	180	0.033	5.0	10.5	10.0	7.5	1,100	550,000	76ID2330(1)40(2)	R76ID2330(1)40(2)
250	180	0.039	6.0	12.0	10.5	7.5	1,100	550,000	76ID2390(1)30(2)	R76ID2390(1)30(2)
250	180	0.047	6.0	12.0	10.5	7.5	1,100	550,000	76ID2470(1)30(2)	R76ID2470(1)30(2)
250	180	0.027	4.0	9.0	13.0	10.0	1,000	500,000	76IF2270(1)30(2)	R76IF2270(1)30(2)
250	180	0.033	4.0	9.0	13.0	10.0	1,000	500,000	76IF2330(1)30(2)	R76IF2330(1)30(2)
250	180	0.039	4.0	9.0	13.0	10.0	1,000	500,000	76IF2390(1)30(2)	R76IF2390(1)30(2)
250	180	0.047	5.0	11.0	13.0	10.0	1,000	500,000	76IF2470(1)30(2)	R76IF2470(1)30(2)
250	180	0.056	5.0	11.0	13.0	10.0	1,000	500,000	76IF2560(1)30(2)	R76IF2560(1)30(2)
250	180	0.068	6.0	12.0	13.0	10.0	1,000	500,000	76IF2680(1)30(2)	R76IF2680(1)30(2)
250	180	0.082	6.0	12.0	13.0	10.0	1,000	500,000	76IF2820(1)30(2)	R76IF2820(1)30(2)
250	180	0.068	5.0	11.0	18.0	15.0	550	275,000	76II2680(1)30(2)	R76II2680(1)30(2)
250	180	0.082	5.0	11.0	18.0	15.0	550	275,000	76II2820(1)30(2)	R76II2820(1)30(2)
250	180	0.10	5.0	11.0	18.0	15.0	550	275,000	76II3100(1)30(2)	R76II3100(1)30(2)
250	180	0.12	6.0	12.0	18.0	15.0	550	275,000	76II3120(1)30(2)	R76II3120(1)30(2)
250	180	0.15	6.0	12.0	18.0	15.0	550	275,000	76II3150(1)30(2)	R76II3150(1)30(2)
250	180	0.18	7.5	13.5	18.0	15.0	550	275,000	76II3180(1)30(2)	R76II3180(1)30(2)
250	180	0.18	9.0	12.5	18.0	15.0	550	275,000	76II3180(1)70(2)	R76II3180(1)70(2)
250	180	0.22	7.5	13.5	18.0	15.0	550	275,000	76II3220(1)30(2)	R76II3220(1)30(2)
250	180	0.22	9.0	12.5	18.0	15.0	550	275,000	76II3220(1)70(2)	R76II3220(1)70(2)
250	180	0.27	8.5	14.5	18.0	15.0	550	275,000	76II3270(1)30(2)	R76II3270(1)30(2)
250	180	0.27	9.0	12.5	18.0	15.0	550	275,000	76II3270(1)70(2)	R76II3270(1)70(2)
250	180	0.33	10.0	16.0	18.0	15.0	550	275,000	76II3330(1)30(2)	R76II3330(1)30(2)
250	180	0.33	13.0	12.0	18.0	15.0	550	275,000	76II3330(1)70(2)	R76II3330(1)70(2)
250	180	0.39	10.0	16.0	18.0	15.0	550	275,000	76II3390(1)30(2)	R76II3390(1)30(2)
250	180	0.47	11.0	19.0	18.0	15.0	550	275,000	76II3470(1)30(2)	R76II3470(1)30(2)
250	180	0.22	6.0	15.0	26.5	22.5	250	125,000	76IN3220(1)00(2)	R76IN3220(1)00(2)
250	180	0.27	6.0	15.0	26.5	22.5	250	125,000	76IN3270(1)30(2)	R76IN3270(1)30(2)
250	180	0.33	6.0	15.0	26.5	22.5	250	125,000	76IN3330(1)30(2)	R76IN3330(1)30(2)
250	180	0.39	7.0	16.0	26.5	22.5	250	125,000	76IN3390(1)30(2)	R76IN3390(1)30(2)
250	180	0.47	7.0	16.0	26.5	22.5	250	125,000	76IN3470(1)30(2)	R76IN3470(1)30(2)
250	180	0.56	8.5	17.0	26.5	22.5	250	125,000	76IN3560(1)30(2)	R76IN3560(1)30(2)
250	180	0.68	10.0	18.5	26.5	22.5	250	125,000	76IN3680(1)30(2)	R76IN3680(1)30(2)
250	180	0.82	10.0	18.5	26.5	22.5	250	125,000	76IN3820(1)30(2)	R76IN3820(1)30(2)
250	180	1.0	11.0	20.0	26.5	22.5	250	125,000	76IN4100(1)30(2)	R76IN4100(1)30(2)
250	180	1.2	13.0	22.0	26.5	22.5	250	125,000	76IN4120(1)30(2)	R76IN4120(1)30(2)
250	180	0.82	9.0	17.0	32.0	27.5	200	100,000	76IR3820(1)30(2)	R76IR3820(1)30(2)
250	180	1.0	11.0	20.0	32.0	27.5	200	100,000	76IR4100(1)30(2)	R76IR4100(1)30(2)
250	180	1.2	11.0	20.0	32.0	27.5	200	100,000	76IR4120(1)40(2)	R76IR4120(1)40(2)
250	180	1.5	13.0	22.0	32.0	27.5	200	100,000	76IR4150(1)30(2)	R76IR4150(1)30(2)
250	180	1.8	13.0	22.0	32.0	27.5	200	100,000	76IR4180(1)40(2)	R76IR4180(1)40(2)
250	180	2.2	14.0	28.0	32.0	27.5	200	100,000	76IR4220(1)40(2)	R76IR4220(1)40(2)
250	180	2.7	18.0	33.0	32.0	27.5	200	100,000	76IR4270(1)30(2)	R76IR4270(1)30(2)
250	180	3.3	18.0	33.0	32.0	27.5	200	100,000	76IR4330(1)30(2)	R76IR4330(1)30(2)
250	180	3.9	18.0	33.0	32.0	27.5	200	100,000	76IR4390(1)30(2)	R76IR4390(1)30(2)
250	180	4.7	22.0	37.0	32.0	27.5	200	100,000	76IR4470(1)30(2)	R76IR4470(1)30(2)
250	180	5.6	22.0	37.0	32.0	27.5	200	100,000	76IR4560(1)40(2)	R76IR4560(1)40(2)
250	180	1.2	11.0	22.0	41.5	37.5	100	50,000	76IW4120(1)30(2)	R76IW4120(1)30(2)
250	180	1.5	11.0	22.0	41.5	37.5	100	50,000	76IW4150(1)30(2)	R76IW4150(1)30(2)
250	180	1.8	11.0	22.0	41.5	37.5	100	50,000	76IW4180(1)30(2)	R76IW4180(1)30(2)
250	180	2.2	13.0	24.0	41.5	37.5	100	50,000	76IW4220(1)30(2)	R76IW4220(1)30(2)
250	180	2.7	13.0	24.0	41.5	37.5	100	50,000	76IW4270(1)30(2)	R76IW4270(1)30(2)
250	180	3.3	16.0	28.5	41.5	37.5	100	50,000	76IW4330(1)30(2)	R76IW4330(1)30(2)
VDC	VAC	Capacitance Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

(2) J = 5%, K = 10%

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
250	180	3.9	16.0	28.5	41.5	37.5	100	50,000	76IW4390(1)30(2)	R76IW4390(1)30(2)
250	180	4.7	19.0	32.0	41.5	37.5	100	50,000	76IW4470(1)30(2)	R76IW4470(1)30(2)
250	180	5.6	19.0	32.0	41.5	37.5	100	50,000	76IW4560(1)30(2)	R76IW4560(1)30(2)
250	180	6.8	20.0	40.0	41.5	37.5	100	50,000	76IW4680(1)30(2)	R76IW4680(1)30(2)
250	180	8.2	20.0	40.0	41.5	37.5	100	50,000	76IW4820(1)30(2)	R76IW4820(1)30(2)
250	180	10	24.0	44.0	41.5	37.5	100	50,000	76IW5100(1)30(2)	R76IW5100(1)30(2)
250	180	12	30.0	45.0	41.5	37.5	100	50,000	76IW5120(1)30(2)	R76IW5120(1)30(2)
250	180	15	30.0	45.0	41.5	37.5	100	50,000	76IW5150(1)30(2)	R76IW5150(1)30(2)
400	250	0.0027	3.0	8.0	10.0	7.5	1,700	1,360,000	76MD1270(1)30(2)	R76MD1270(1)30(2)
400	250	0.0033	3.0	8.0	10.0	7.5	1,700	1,360,000	76MD1330(1)30(2)	R76MD1330(1)30(2)
400	250	0.0039	3.0	8.0	10.0	7.5	1,700	1,360,000	76MD1390(1)30(2)	R76MD1390(1)30(2)
400	250	0.0047	3.0	8.0	10.0	7.5	1,700	1,360,000	76MD1470(1)30(2)	R76MD1470(1)30(2)
400	250	0.0056	3.0	8.0	10.0	7.5	1,700	1,360,000	76MD1560(1)30(2)	R76MD1560(1)30(2)
400	250	0.0068	4.0	9.0	10.0	7.5	1,700	1,360,000	76MD1680(1)40(2)	R76MD1680(1)40(2)
400	250	0.0082	4.0	9.0	10.0	7.5	1,700	1,360,000	76MD1820(1)40(2)	R76MD1820(1)40(2)
400	250	0.010	4.0	9.0	10.0	7.5	1,700	1,360,000	76MD2100(1)40(2)	R76MD2100(1)40(2)
400	250	0.012	4.0	9.0	10.0	7.5	1,700	1,360,000	76MD2120(1)40(2)	R76MD2120(1)40(2)
400	250	0.015	5.0	10.5	10.0	7.5	1,700	1,360,000	76MD2150(1)40(2)	R76MD2150(1)40(2)
400	250	0.018	5.0	10.5	10.0	7.5	1,700	1,360,000	76MD2180(1)40(2)	R76MD2180(1)40(2)
400	250	0.022	6.0	12.0	10.5	7.5	1,700	1,360,000	76MD2220(1)30(2)	R76MD2220(1)30(2)
400	250	0.027	6.0	12.0	10.5	7.5	1,700	1,360,000	76MD2270(1)30(2)	R76MD2270(1)30(2)
400	250	0.010	4.0	9.0	13.0	10.0	1,500	1,200,000	76MF2100(1)00(2)	R76MF2100(1)00(2)
400	250	0.012	4.0	9.0	13.0	10.0	1,500	1,200,000	76MF2120(1)00(2)	R76MF2120(1)00(2)
400	250	0.015	4.0	9.0	13.0	10.0	1,500	1,200,000	76MF2150(1)30(2)	R76MF2150(1)30(2)
400	250	0.018	4.0	9.0	13.0	10.0	1,500	1,200,000	76MF2180(1)30(2)	R76MF2180(1)30(2)
400	250	0.022	4.0	9.0	13.0	10.0	1,500	1,200,000	76MF2220(1)30(2)	R76MF2220(1)30(2)
400	250	0.027	5.0	11.0	13.0	10.0	1,500	1,200,000	76MF2270(1)30(2)	R76MF2270(1)30(2)
400	250	0.033	5.0	11.0	13.0	10.0	1,500	1,200,000	76MF2330(1)30(2)	R76MF2330(1)30(2)
400	250	0.039	6.0	12.0	13.0	10.0	1,500	1,200,000	76MF2390(1)30(2)	R76MF2390(1)30(2)
400	250	0.047	6.0	12.0	13.0	10.0	1,500	1,200,000	76MF2470(1)30(2)	R76MF2470(1)30(2)
400	250	0.033	5.0	11.0	18.0	15.0	900	720,000	76MI2330(1)00(2)	R76MI2330(1)00(2)
400	250	0.039	5.0	11.0	18.0	15.0	900	720,000	76MI2390(1)30(2)	R76MI2390(1)30(2)
400	250	0.047	5.0	11.0	18.0	15.0	900	720,000	76MI2470(1)30(2)	R76MI2470(1)30(2)
400	250	0.056	5.0	11.0	18.0	15.0	900	720,000	76MI2560(1)30(2)	R76MI2560(1)30(2)
400	250	0.068	6.0	12.0	18.0	15.0	900	720,000	76MI2680(1)30(2)	R76MI2680(1)30(2)
400	250	0.082	6.0	12.0	18.0	15.0	900	720,000	76MI2820(1)30(2)	R76MI2820(1)30(2)
400	250	0.10	7.5	13.5	18.0	15.0	900	720,000	76MI3100(1)30(2)	R76MI3100(1)30(2)
400	250	0.10	9.0	12.5	18.0	15.0	900	720,000	76MI3100(1)70(2)	R76MI3100(1)70(2)
400	250	0.12	7.5	13.5	18.0	15.0	900	720,000	76MI3120(1)30(2)	R76MI3120(1)30(2)
400	250	0.12	9.0	12.5	18.0	15.0	900	720,000	76MI3120(1)70(2)	R76MI3120(1)70(2)
400	250	0.15	8.5	14.5	18.0	15.0	900	720,000	76MI3150(1)30(2)	R76MI3150(1)30(2)
400	250	0.15	13.0	12.0	18.0	15.0	900	720,000	76MI3150(1)70(2)	R76MI3150(1)70(2)
400	250	0.18	10.0	16.0	18.0	15.0	900	720,000	76MI3180(1)30(2)	R76MI3180(1)30(2)
400	250	0.18	13.0	12.0	18.0	15.0	900	720,000	76MI3180(1)70(2)	R76MI3180(1)70(2)
400	250	0.22	10.0	16.0	18.0	15.0	900	720,000	76MI3220(1)30(2)	R76MI3220(1)30(2)
400	250	0.27	11.0	19.0	18.0	15.0	900	720,000	76MI3270(1)30(2)	R76MI3270(1)30(2)
400	250	0.12	6.0	15.0	26.5	22.5	500	400,000	76MN3120(1)30(2)	R76MN3120(1)30(2)
400	250	0.15	6.0	15.0	26.5	22.5	500	400,000	76MN3150(1)30(2)	R76MN3150(1)30(2)
400	250	0.18	6.0	15.0	26.5	22.5	500	400,000	76MN3180(1)30(2)	R76MN3180(1)30(2)
400	250	0.22	7.0	16.0	26.5	22.5	500	400,000	76MN3220(1)30(2)	R76MN3220(1)30(2)
400	250	0.27	8.5	17.0	26.5	22.5	500	400,000	76MN3270(1)30(2)	R76MN3270(1)30(2)
400	250	0.33	8.5	17.0	26.5	22.5	500	400,000	76MN3330(1)30(2)	R76MN3330(1)30(2)
400	250	0.39	10.0	18.5	26.5	22.5	500	400,000	76MN3390(1)30(2)	R76MN3390(1)30(2)
400	250	0.47	10.0	18.5	26.5	22.5	500	400,000	76MN3470(1)30(2)	R76MN3470(1)30(2)
400	250	0.56	11.0	20.0	26.5	22.5	500	400,000	76MN3560(1)30(2)	R76MN3560(1)30(2)
400	250	0.68	13.0	22.0	26.5	22.5	500	400,000	76MN3680(1)30(2)	R76MN3680(1)30(2)
400	250	0.39	9.0	17.0	32.0	27.5	300	240,000	76MR3390(1)30(2)	R76MR3390(1)30(2)
400	250	0.47	9.0	17.0	32.0	27.5	300	240,000	76MR3470(1)30(2)	R76MR3470(1)30(2)
400	250	0.56	11.0	20.0	32.0	27.5	300	240,000	76MR3560(1)30(2)	R76MR3560(1)30(2)
400	250	0.68	11.0	20.0	32.0	27.5	300	240,000	76MR3680(1)30(2)	R76MR3680(1)30(2)
VDC	VAC	Capacitance Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

(2) J = 5%, K = 10%

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (μ F)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/ μ s)	Max K ₀ (V ² / μ s)	New KEMET Part Number	Legacy Part Number
			B	H	L					
400	250	0.82	13.0	22.0	32.0	27.5	300	240,000	76MR3820(1)30(2)	R76MR3820(1)30(2)
400	250	1.0	13.0	22.0	32.0	27.5	300	240,000	76MR4100(1)40(2)	R76MR4100(1)40(2)
400	250	1.2	14.0	28.0	32.0	27.5	300	240,000	76MR4120(1)40(2)	R76MR4120(1)40(2)
400	250	1.5	18.0	33.0	32.0	27.5	300	240,000	76MR4150(1)30(2)	R76MR4150(1)30(2)
400	250	1.8	18.0	33.0	32.0	27.5	300	240,000	76MR4180(1)30(2)	R76MR4180(1)30(2)
400	250	2.2	22.0	37.0	32.0	27.5	300	240,000	76MR4220(1)30(2)	R76MR4220(1)30(2)
400	250	2.7	22.0	37.0	32.0	27.5	300	240,000	76MR4270(1)30(2)	R76MR4270(1)30(2)
400	250	1.0	11.0	22.0	41.5	37.5	180	144,000	76MW4100(1)30(2)	R76MW4100(1)30(2)
400	250	1.2	13.0	24.0	41.5	37.5	180	144,000	76MW4120(1)30(2)	R76MW4120(1)30(2)
400	250	1.5	13.0	24.0	41.5	37.5	180	144,000	76MW4150(1)30(2)	R76MW4150(1)30(2)
400	250	1.8	16.0	28.5	41.5	37.5	180	144,000	76MW4180(1)30(2)	R76MW4180(1)30(2)
400	250	2.2	19.0	32.0	41.5	37.5	180	144,000	76MW4220(1)30(2)	R76MW4220(1)30(2)
400	250	2.7	19.0	32.0	41.5	37.5	180	144,000	76MW4270(1)30(2)	R76MW4270(1)30(2)
400	250	3.3	19.0	32.0	41.5	37.5	180	144,000	76MW4330(1)30(2)	R76MW4330(1)30(2)
400	250	3.9	20.0	40.0	41.5	37.5	180	144,000	76MW4390(1)30(2)	R76MW4390(1)30(2)
400	250	4.7	20.0	40.0	41.5	37.5	180	144,000	76MW4470(1)30(2)	R76MW4470(1)30(2)
400	250	5.6	24.0	44.0	41.5	37.5	180	144,000	76MW4560(1)30(2)	R76MW4560(1)30(2)
400	250	6.8	30.0	45.0	41.5	37.5	180	144,000	76MW4680(1)30(2)	R76MW4680(1)30(2)
400	250	8.2	30.0	45.0	41.5	37.5	180	144,000	76MW4820(1)30(2)	R76MW4820(1)30(2)
630	250	0.00068	3.0	8.0	10.0	7.5	2,800	3,528,000	76PD0680(1)00(2)	R76PD0680(1)00(2)
630	250	0.0008	3.0	8.0	10.0	7.5	2,800	3,528,000	76PD0820(1)00(2)	R76PD0820(1)00(2)
630	250	0.0010	3.0	8.0	10.0	7.5	2,800	3,528,000	76PD1100(1)00(2)	R76PD1100(1)00(2)
630	250	0.0012	3.0	8.0	10.0	7.5	2,800	3,528,000	76PD1120(1)00(2)	R76PD1120(1)00(2)
630	250	0.0015	3.0	8.0	10.0	7.5	2,800	3,528,000	76PD1150(1)00(2)	R76PD1150(1)00(2)
630	250	0.0018	3.0	8.0	10.0	7.5	2,800	3,528,000	76PD1180(1)00(2)	R76PD1180(1)00(2)
630	250	0.0022	3.0	8.0	10.0	7.5	2,800	3,528,000	76PD1220(1)00(2)	R76PD1220(1)00(2)
630	250	0.0027	4.0	9.0	10.0	7.5	2,800	3,528,000	76PD1270(1)40(2)	R76PD1270(1)40(2)
630	250	0.0033	4.0	9.0	10.0	7.5	2,800	3,528,000	76PD1330(1)40(2)	R76PD1330(1)40(2)
630	250	0.0039	4.0	9.0	10.0	7.5	2,800	3,528,000	76PD1390(1)40(2)	R76PD1390(1)40(2)
630	250	0.0047	4.0	9.0	10.0	7.5	2,800	3,528,000	76PD1470(1)40(2)	R76PD1470(1)40(2)
630	250	0.0056	4.0	9.0	10.0	7.5	2,800	3,528,000	76PD1560(1)40(2)	R76PD1560(1)40(2)
630	250	0.0068	5.0	10.5	10.0	7.5	2,800	3,528,000	76PD1680(1)40(2)	R76PD1680(1)40(2)
630	250	0.0082	5.0	10.5	10.0	7.5	2,800	3,528,000	76PD1820(1)40(2)	R76PD1820(1)40(2)
630	250	0.010	6.0	12.0	10.5	7.5	2,800	3,528,000	76PD2100(1)30(2)	R76PD2100(1)30(2)
630	250	0.012	6.0	12.0	10.5	7.5	2,800	3,528,000	76PD2120(1)30(2)	R76PD2120(1)30(2)
630	400	0.0039	4.0	9.0	13.0	10.0	3,000	3,780,000	76PF1390(1)00(2)	R76PF1390(1)00(2)
630	400	0.0047	4.0	9.0	13.0	10.0	3,000	3,780,000	76PF1470(1)00(2)	R76PF1470(1)00(2)
630	400	0.0056	4.0	9.0	13.0	10.0	3,000	3,780,000	76PF1560(1)00(2)	R76PF1560(1)00(2)
630	400	0.0068	4.0	9.0	13.0	10.0	3,000	3,780,000	76PF1680(1)00(2)	R76PF1680(1)00(2)
630	400	0.0082	4.0	9.0	13.0	10.0	3,000	3,780,000	76PF1820(1)00(2)	R76PF1820(1)00(2)
630	400	0.010	5.0	11.0	13.0	10.0	3,000	3,780,000	76PF2100(1)30(2)	R76PF2100(1)30(2)
630	400	0.012	5.0	11.0	13.0	10.0	3,000	3,780,000	76PF2120(1)30(2)	R76PF2120(1)30(2)
630	400	0.015	6.0	12.0	13.0	10.0	3,000	3,780,000	76PF2150(1)30(2)	R76PF2150(1)30(2)
630	400	0.018	6.0	12.0	13.0	10.0	3,000	3,780,000	76PF2180(1)30(2)	R76PF2180(1)30(2)
630	400	0.012	5.0	11.0	18.0	15.0	2,500	3,150,000	76PI2120(1)00(2)	R76PI2120(1)00(2)
630	400	0.015	5.0	11.0	18.0	15.0	2,500	3,150,000	76PI2150(1)00(2)	R76PI2150(1)00(2)
630	400	0.018	5.0	11.0	18.0	15.0	2,500	3,150,000	76PI2180(1)00(2)	R76PI2180(1)00(2)
630	400	0.022	5.0	11.0	18.0	15.0	2,500	3,150,000	76PI2220(1)30(2)	R76PI2220(1)30(2)
630	400	0.027	5.0	11.0	18.0	15.0	2,500	3,150,000	76PI2270(1)30(2)	R76PI2270(1)30(2)
630	400	0.033	6.0	12.0	18.0	15.0	2,500	3,150,000	76PI2330(1)30(2)	R76PI2330(1)30(2)
630	400	0.039	6.0	12.0	18.0	15.0	2,500	3,150,000	76PI2390(1)30(2)	R76PI2390(1)30(2)
630	400	0.047	7.5	13.5	18.0	15.0	2,500	3,150,000	76PI2470(1)30(2)	R76PI2470(1)30(2)
630	400	0.047	9.0	12.5	18.0	15.0	2,500	3,150,000	76PI2470(1)70(2)	R76PI2470(1)70(2)
630	400	0.056	7.5	13.5	18.0	15.0	2,500	3,150,000	76PI2560(1)30(2)	R76PI2560(1)30(2)
630	400	0.056	9.0	12.5	18.0	15.0	2,500	3,150,000	76PI2560(1)70(2)	R76PI2560(1)70(2)
630	400	0.068	8.5	14.5	18.0	15.0	2,500	3,150,000	76PI2680(1)30(2)	R76PI2680(1)30(2)
630	400	0.068	9.0	12.5	18.0	15.0	2,500	3,150,000	76PI2680(1)70(2)	R76PI2680(1)70(2)
630	400	0.082	8.5	14.5	18.0	15.0	2,500	3,150,000	76PI2820(1)30(2)	R76PI2820(1)30(2)
630	400	0.082	13.0	12.0	18.0	15.0	2,500	3,150,000	76PI2820(1)70(2)	R76PI2820(1)70(2)
630	400	0.10	10.0	16.0	18.0	15.0	2,500	3,150,000	76PI3100(1)30(2)	R76PI3100(1)30(2)
VDC	VAC	Capacitance Value (μ F)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/ μ s)	Max K ₀ (V ² / μ s)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

(2) H = 2.5%, J = 5%, K = 10%

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (μF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/μs)	Max K ₀ (V ² /μs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
630	400	0.12	11.0	19.0	18.0	15.0	2,500	3,150,000	76PI3120(1)30(2)	R76PI3120(1)30(2)
630	400	0.047	6.0	15.0	26.5	22.5	1,500	1,890,000	76PN2470(1)00(2)	R76PN2470(1)00(2)
630	400	0.056	6.0	15.0	26.5	22.5	1,500	1,890,000	76PN2560(1)00(2)	R76PN2560(1)00(2)
630	400	0.068	6.0	15.0	26.5	22.5	1,500	1,890,000	76PN2680(1)00(2)	R76PN2680(1)00(2)
630	400	0.082	6.0	15.0	26.5	22.5	1,500	1,890,000	76PN2820(1)30(2)	R76PN2820(1)30(2)
630	400	0.10	6.0	15.0	26.5	22.5	1,500	1,890,000	76PN3100(1)30(2)	R76PN3100(1)30(2)
630	400	0.12	7.0	16.0	26.5	22.5	1,500	1,890,000	76PN3120(1)30(2)	R76PN3120(1)30(2)
630	400	0.15	8.5	17.0	26.5	22.5	1,500	1,890,000	76PN3150(1)30(2)	R76PN3150(1)30(2)
630	400	0.18	8.5	17.0	26.5	22.5	1,500	1,890,000	76PN3180(1)30(2)	R76PN3180(1)30(2)
630	400	0.22	10.0	18.5	26.5	22.5	1,500	1,890,000	76PN3220(1)30(2)	R76PN3220(1)30(2)
630	400	0.27	11.0	20.0	26.5	22.5	1,500	1,890,000	76PN3270(1)30(2)	R76PN3270(1)30(2)
630	400	0.33	11.0	20.0	26.5	22.5	1,500	1,890,000	76PN3330(1)30(2)	R76PN3330(1)30(2)
630	400	0.39	13.0	22.0	26.5	22.5	1,500	1,890,000	76PN3390(1)30(2)	R76PN3390(1)30(2)
630	400	0.15	9.0	17.0	32.0	27.5	900	1,134,000	76PR3150(1)30(2)	R76PR3150(1)30(2)
630	400	0.18	9.0	17.0	32.0	27.5	900	1,134,000	76PR3180(1)30(2)	R76PR3180(1)30(2)
630	400	0.22	9.0	17.0	32.0	27.5	900	1,134,000	76PR3220(1)30(2)	R76PR3220(1)30(2)
630	400	0.27	9.0	17.0	32.0	27.5	900	1,134,000	76PR3270(1)30(2)	R76PR3270(1)30(2)
630	400	0.33	11.0	20.0	32.0	27.5	900	1,134,000	76PR3330(1)40(2)	R76PR3330(1)40(2)
630	400	0.39	11.0	20.0	32.0	27.5	900	1,134,000	76PR3390(1)30(2)	R76PR3390(1)30(2)
630	400	0.47	13.0	22.0	32.0	27.5	900	1,134,000	76PR3470(1)30(2)	R76PR3470(1)30(2)
630	400	0.56	13.0	22.0	32.0	27.5	900	1,134,000	76PR3560(1)30(2)	R76PR3560(1)30(2)
630	400	0.68	13.0	25.0	32.0	27.5	900	1,134,000	76PR3680(1)40(2)	R76PR3680(1)40(2)
630	400	0.82	14.0	28.0	32.0	27.5	900	1,134,000	76PR3820(1)30(2)	R76PR3820(1)30(2)
630	400	1.0	18.0	33.0	32.0	27.5	900	1,134,000	76PR4100(1)30(2)	R76PR4100(1)30(2)
630	400	1.2	18.0	33.0	32.0	27.5	900	1,134,000	76PR4120(1)30(2)	R76PR4120(1)30(2)
630	400	1.5	22.0	37.0	32.0	27.5	900	1,134,000	76PR4150(1)30(2)	R76PR4150(1)30(2)
630	400	1.8	22.0	37.0	32.0	27.5	900	1,134,000	76PR4180(1)30(2)	R76PR4180(1)30(2)
630	400	0.33	11.0	22.0	41.5	37.5	450	567,000	76PW3330(1)30(2)	R76PW3330(1)30(2)
630	400	0.39	11.0	22.0	41.5	37.5	450	567,000	76PW3390(1)30(2)	R76PW3390(1)30(2)
630	400	0.47	11.0	22.0	41.5	37.5	450	567,000	76PW3470(1)30(2)	R76PW3470(1)30(2)
630	400	0.56	11.0	22.0	41.5	37.5	450	567,000	76PW3560(1)30(2)	R76PW3560(1)30(2)
630	400	0.68	11.0	22.0	41.5	37.5	450	567,000	76PW3680(1)30(2)	R76PW3680(1)30(2)
630	400	0.82	13.0	24.0	41.5	37.5	450	567,000	76PW3820(1)30(2)	R76PW3820(1)30(2)
630	400	1.0	16.0	28.5	41.5	37.5	450	567,000	76PW4100(1)30(2)	R76PW4100(1)30(2)
630	400	1.2	16.0	28.5	41.5	37.5	450	567,000	76PW4120(1)30(2)	R76PW4120(1)30(2)
630	400	1.5	16.0	28.5	41.5	37.5	450	567,000	76PW4150(1)30(2)	R76PW4150(1)30(2)
630	400	1.8	19.0	32.0	41.5	37.5	450	567,000	76PW4180(1)30(2)	R76PW4180(1)30(2)
630	400	2.2	20.0	40.0	41.5	37.5	450	567,000	76PW4220(1)30(2)	R76PW4220(1)30(2)
630	400	2.7	20.0	40.0	41.5	37.5	450	567,000	76PW4270(1)30(2)	R76PW4270(1)30(2)
630	400	3.3	24.0	44.0	41.5	37.5	450	567,000	76PW4330(1)30(2)	R76PW4330(1)30(2)
630	400	3.9	30.0	45.0	41.5	37.5	450	567,000	76PW4390(1)30(2)	R76PW4390(1)30(2)
630	400	4.7	30.0	45.0	41.5	37.5	450	567,000	76PW4470(1)30(2)	R76PW4470(1)30(2)
630	400	5.6	30.0	45.0	41.5	37.5	450	567,000	76PW4560(1)30(2)	R76PW4560(1)30(2)
1,000	400	0.00022	3.0	8.0	10.0	7.5	6,000	12,000,000	76QD0220(1)00(2)	R76QD0220(1)00(2)
1,000	400	0.00027	3.0	8.0	10.0	7.5	6,000	12,000,000	76QD0270(1)00(2)	R76QD0270(1)00(2)
1,000	400	0.00033	3.0	8.0	10.0	7.5	6,000	12,000,000	76QD0330(1)00(2)	R76QD0330(1)00(2)
1,000	400	0.00039	3.0	8.0	10.0	7.5	6,000	12,000,000	76QD0390(1)00(2)	R76QD0390(1)00(2)
1,000	400	0.00047	3.0	8.0	10.0	7.5	6,000	12,000,000	76QD0470(1)00(2)	R76QD0470(1)00(2)
1,000	400	0.00056	3.0	8.0	10.0	7.5	6,000	12,000,000	76QD0560(1)00(2)	R76QD0560(1)00(2)
1,000	400	0.00068	4.0	9.0	10.0	7.5	6,000	12,000,000	76QD0680(1)40(2)	R76QD0680(1)40(2)
1,000	400	0.00082	4.0	9.0	10.0	7.5	6,000	12,000,000	76QD0820(1)40(2)	R76QD0820(1)40(2)
1,000	400	0.0010	4.0	9.0	10.0	7.5	6,000	12,000,000	76QD1100(1)40(2)	R76QD1100(1)40(2)
1,000	400	0.0012	4.0	9.0	10.0	7.5	6,000	12,000,000	76QD1120(1)40(2)	R76QD1120(1)40(2)
1,000	400	0.0015	5.0	10.5	10.0	7.5	6,000	12,000,000	76QD1150(1)40(2)	R76QD1150(1)40(2)
1,000	400	0.0018	5.0	10.5	10.0	7.5	6,000	12,000,000	76QD1180(1)40(2)	R76QD1180(1)40(2)
1,000	400	0.0022	5.0	10.5	10.0	7.5	6,000	12,000,000	76QD1220(1)40(2)	R76QD1220(1)40(2)
1,000	400	0.0027	6.0	12.0	10.5	7.5	6,000	12,000,000	76QD1270(1)00(2)	R76QD1270(1)00(2)
1,000	400	0.0033	6.0	12.0	10.5	7.5	6,000	12,000,000	76QD1330(1)00(2)	R76QD1330(1)00(2)
1,000	600	0.00047	4.0	9.0	13.0	10.0	4,800	9,600,000	76QF0470(1)00(2)	R76QF0470(1)00(2)
1,000	600	0.00056	4.0	9.0	13.0	10.0	4,800	9,600,000	76QF0560(1)00(2)	R76QF0560(1)00(2)
VDC	VAC	Capacitance Value (μF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/μs)	Max K ₀ (V ² /μs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

(2) H = 2.5%, J = 5%, K = 10%

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (μF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/μs)	Max K ₀ (V ² /μs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
1,000	600	0.00068	4.0	9.0	13.0	10.0	4,800	9,600,000	76QF0680(1)00(2)	R76QF0680(1)00(2)
1,000	600	0.00082	4.0	9.0	13.0	10.0	4,800	9,600,000	76QF0820(1)00(2)	R76QF0820(1)00(2)
1,000	600	0.0010	4.0	9.0	13.0	10.0	4,800	9,600,000	76QF1100(1)00(2)	R76QF1100(1)00(2)
1,000	600	0.0012	4.0	9.0	13.0	10.0	4,800	9,600,000	76QF1120(1)00(2)	R76QF1120(1)00(2)
1,000	600	0.0015	4.0	9.0	13.0	10.0	4,800	9,600,000	76QF1150(1)00(2)	R76QF1150(1)00(2)
1,000	600	0.0018	4.0	9.0	13.0	10.0	4,800	9,600,000	76QF1180(1)00(2)	R76QF1180(1)00(2)
1,000	600	0.0022	4.0	9.0	13.0	10.0	4,800	9,600,000	76QF1220(1)00(2)	R76QF1220(1)00(2)
1,000	600	0.0027	4.0	9.0	13.0	10.0	4,800	9,600,000	76QF1270(1)00(2)	R76QF1270(1)00(2)
1,000	600	0.0033	4.0	9.0	13.0	10.0	4,800	9,600,000	76QF1330(1)30(2)	R76QF1330(1)30(2)
1,000	600	0.0039	5.0	11.0	13.0	10.0	4,800	9,600,000	76QF1390(1)30(2)	R76QF1390(1)30(2)
1,000	600	0.0047	5.0	11.0	13.0	10.0	4,800	9,600,000	76QF1470(1)30(2)	R76QF1470(1)30(2)
1,000	600	0.0056	6.0	12.0	13.0	10.0	4,800	9,600,000	76QF1560(1)30(2)	R76QF1560(1)30(2)
1,000	600	0.0068	6.0	12.0	13.0	10.0	4,800	9,600,000	76QF1680(1)30(2)	R76QF1680(1)30(2)
1,000	600	0.0082	4.0	10.0	18.0	15.0	3,300	6,600,000	76QH1820(1)40(2)	R76QH1820(1)40(2)
1,000	600	0.0082	5.0	11.0	18.0	15.0	3,300	6,600,000	76QH1820(1)00(2)	R76QH1820(1)00(2)
1,000	600	0.010	4.0	10.0	18.0	15.0	3,300	6,600,000	76QI2100(1)40(2)	R76QI2100(1)40(2)
1,000	600	0.010	5.0	11.0	18.0	15.0	3,300	6,600,000	76QI2100(1)30(2)	R76QI2100(1)30(2)
1,000	600	0.012	5.0	11.0	18.0	15.0	3,300	6,600,000	76QI2120(1)30(2)	R76QI2120(1)30(2)
1,000	600	0.015	5.0	11.0	18.0	15.0	3,300	6,600,000	76QI2150(1)40(2)	R76QI2150(1)40(2)
1,000	600	0.018	5.0	11.0	18.0	15.0	3,300	6,600,000	76QI2180(1)40(2)	R76QI2180(1)40(2)
1,000	600	0.022	6.0	12.0	18.0	15.0	3,300	6,600,000	76QI2220(1)40(2)	R76QI2220(1)40(2)
1,000	600	0.022	9.0	12.5	18.0	15.0	3,300	6,600,000	76QI2220(1)70(2)	R76QI2220(1)70(2)
1,000	600	0.027	7.5	13.5	18.0	15.0	3,300	6,600,000	76QI2270(1)40(2)	R76QI2270(1)40(2)
1,000	600	0.027	9.0	12.5	18.0	15.0	3,300	6,600,000	76QI2270(1)70(2)	R76QI2270(1)70(2)
1,000	600	0.033	7.5	13.5	18.0	15.0	3,300	6,600,000	76QI2330(1)40(2)	R76QI2330(1)40(2)
1,000	600	0.033	13.0	12.0	18.0	15.0	3,300	6,600,000	76QI2330(1)70(2)	R76QI2330(1)70(2)
1,000	600	0.039	8.5	14.5	18.0	15.0	3,300	6,600,000	76QI2390(1)40(2)	R76QI2390(1)40(2)
1,000	600	0.047	8.5	14.5	18.0	15.0	3,300	6,600,000	76QI2470(1)40(2)	R76QI2470(1)40(2)
1,000	600	0.027	6.0	15.0	26.5	22.5	2,100	4,200,000	76QN2270(1)00(2)	R76QN2270(1)00(2)
1,000	600	0.033	6.0	15.0	26.5	22.5	2,100	4,200,000	76QN2330(1)30(2)	R76QN2330(1)30(2)
1,000	600	0.039	6.0	15.0	26.5	22.5	2,100	4,200,000	76QN2390(1)30(2)	R76QN2390(1)30(2)
1,000	600	0.047	7.0	16.0	26.5	22.5	2,100	4,200,000	76QN2470(1)30(2)	R76QN2470(1)30(2)
1,000	600	0.056	7.0	16.0	26.5	22.5	2,100	4,200,000	76QN2560(1)30(2)	R76QN2560(1)30(2)
1,000	600	0.068	8.5	17.0	26.5	22.5	2,100	4,200,000	76QN2680(1)30(2)	R76QN2680(1)30(2)
1,000	600	0.082	10.0	18.5	26.5	22.5	2,100	4,200,000	76QN2820(1)30(2)	R76QN2820(1)30(2)
1,000	600	0.10	10.0	18.5	26.5	22.5	2,100	4,200,000	76QN3100(1)30(2)	R76QN3100(1)30(2)
1,000	600	0.12	11.0	20.0	26.5	22.5	2,100	4,200,000	76QN3120(1)30(2)	R76QN3120(1)30(2)
1,000	600	0.15	13.0	22.0	26.5	22.5	2,100	4,200,000	76QN3150(1)30(2)	R76QN3150(1)30(2)
1,000	600	0.10	9.0	17.0	32.0	27.5	1,000	2,000,000	76QR3100(1)40(2)	R76QR3100(1)40(2)
1,000	600	0.12	9.0	17.0	32.0	27.5	1,000	2,000,000	76QR3120(1)40(2)	R76QR3120(1)40(2)
1,000	600	0.15	11.0	20.0	32.0	27.5	1,000	2,000,000	76QR3150(1)30(2)	R76QR3150(1)30(2)
1,000	600	0.18	13.0	22.0	32.0	27.5	1,000	2,000,000	76QR3180(1)30(2)	R76QR3180(1)30(2)
1,000	600	0.22	13.0	22.0	32.0	27.5	1,000	2,000,000	76QR3220(1)30(2)	R76QR3220(1)30(2)
1,000	600	0.27	13.0	25.0	32.0	27.5	1,000	2,000,000	76QR3270(1)40(2)	R76QR3270(1)40(2)
1,000	600	0.33	14.0	28.0	32.0	27.5	1,000	2,000,000	76QR3330(1)30(2)	R76QR3330(1)30(2)
1,000	600	0.39	18.0	33.0	32.0	27.5	1,000	2,000,000	76QR3390(1)30(2)	R76QR3390(1)30(2)
1,000	600	0.47	18.0	33.0	32.0	27.5	1,000	2,000,000	76QR3470(1)30(2)	R76QR3470(1)30(2)
1,000	600	0.56	22.0	37.0	32.0	27.5	1,000	2,000,000	76QR3560(1)30(2)	R76QR3560(1)30(2)
1,000	600	0.68	22.0	37.0	32.0	27.5	1,000	2,000,000	76QR3680(1)30(2)	R76QR3680(1)30(2)
1,000	600	0.18	11.0	22.0	41.5	37.5	500	1,000,000	76QW3180(1)30(2)	R76QW3180(1)30(2)
1,000	600	0.22	11.0	22.0	41.5	37.5	500	1,000,000	76QW3220(1)30(2)	R76QW3220(1)30(2)
1,000	600	0.27	13.0	24.0	41.5	37.5	500	1,000,000	76QW3270(1)30(2)	R76QW3270(1)30(2)
1,000	600	0.33	13.0	24.0	41.5	37.5	500	1,000,000	76QW3330(1)30(2)	R76QW3330(1)30(2)
1,000	600	0.39	16.0	28.5	41.5	37.5	500	1,000,000	76QW3390(1)30(2)	R76QW3390(1)30(2)
1,000	600	0.47	16.0	28.5	41.5	37.5	500	1,000,000	76QW3470(1)30(2)	R76QW3470(1)30(2)
1,000	600	0.56	16.0	28.5	41.5	37.5	500	1,000,000	76QW3560(1)30(2)	R76QW3560(1)30(2)
1,000	600	0.68	19.0	32.0	41.5	37.5	500	1,000,000	76QW3680(1)30(2)	R76QW3680(1)30(2)
1,000	600	0.82	20.0	40.0	41.5	37.5	500	1,000,000	76QW3820(1)30(2)	R76QW3820(1)30(2)
1,000	600	1.0	20.0	40.0	41.5	37.5	500	1,000,000	76QW4100(1)30(2)	R76QW4100(1)30(2)
1,000	600	1.2	24.0	44.0	41.5	37.5	500	1,000,000	76QW4120(1)30(2)	R76QW4120(1)30(2)
VDC	VAC	Capacitance Value (μF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/μs)	Max K ₀ (V ² /μs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

(2) H = 2.5%, J = 5%, K = 10%

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
1,000	600	1.5	24.0	44.0	41.5	37.5	500	1,000,000	76QW4150(1)30(2)	R76QW4150(1)30(2)
1,000	600	1.8	30.0	45.0	41.5	37.5	500	1,000,000	76QW4180(1)30(2)	R76QW4180(1)30(2)
1,000	600	2.2	30.0	45.0	41.5	37.5	500	1,000,000	76QW4220(1)30(2)	R76QW4220(1)30(2)
1,600	650	0.0033	4.0	10.0	18.0	15.0	6,000	19,200,000	76T11330(1)40(2)	R76T11330(1)40(2)
1,600	650	0.0033	5.0	11.0	18.0	15.0	6,000	19,200,000	76T11330(1)30(2)	R76T11330(1)30(2)
1,600	650	0.0039	4.0	10.0	18.0	15.0	6,000	19,200,000	76T11390(1)40(2)	R76T11390(1)40(2)
1,600	650	0.0039	5.0	11.0	18.0	15.0	6,000	19,200,000	76T11390(1)30(2)	R76T11390(1)30(2)
1,600	650	0.0047	4.0	10.0	18.0	15.0	6,000	19,200,000	76T11470(1)40(2)	R76T11470(1)40(2)
1,600	650	0.0047	5.0	11.0	18.0	15.0	6,000	19,200,000	76T11470(1)30(2)	R76T11470(1)30(2)
1,600	650	0.0056	4.0	10.0	18.0	15.0	6,000	19,200,000	76T11560(1)40(2)	R76T11560(1)40(2)
1,600	650	0.0056	5.0	11.0	18.0	15.0	6,000	19,200,000	76T11560(1)30(2)	R76T11560(1)30(2)
1,600	650	0.0068	5.0	11.0	18.0	15.0	6,000	19,200,000	76T11680(1)30(2)	R76T11680(1)30(2)
1,600	650	0.0082	5.0	11.0	18.0	15.0	6,000	19,200,000	76T11820(1)40(2)	R76T11820(1)40(2)
1,600	650	0.010	5.0	11.0	18.0	15.0	6,000	19,200,000	76T12100(1)40(2)	R76T12100(1)40(2)
1,600	650	0.012	6.0	12.0	18.0	15.0	6,000	19,200,000	76T12120(1)40(2)	R76T12120(1)40(2)
1,600	650	0.015	6.0	12.0	18.0	15.0	6,000	19,200,000	76T12150(1)40(2)	R76T12150(1)40(2)
1,600	650	0.018	7.5	13.5	18.0	15.0	6,000	19,200,000	76T12180(1)40(2)	R76T12180(1)40(2)
1,600	650	0.018	9.0	12.5	18.0	15.0	6,000	19,200,000	76T12180(1)70(2)	R76T12180(1)70(2)
1,600	650	0.022	7.5	13.5	18.0	15.0	6,000	19,200,000	76T12220(1)40(2)	R76T12220(1)40(2)
1,600	650	0.022	13.0	12.0	18.0	15.0	6,000	19,200,000	76T12220(1)70(2)	R76T12220(1)70(2)
1,600	650	0.027	8.5	14.5	18.0	15.0	6,000	19,200,000	76T12270(1)40(2)	R76T12270(1)40(2)
1,600	650	0.033	8.5	14.5	18.0	15.0	6,000	19,200,000	76T12330(1)40(2)	R76T12330(1)40(2)
1,600	650	0.015	6.0	15.0	26.5	22.5	3,000	9,600,000	76TN2150(1)30(2)	R76TN2150(1)30(2)
1,600	650	0.018	6.0	15.0	26.5	22.5	3,000	9,600,000	76TN2180(1)30(2)	R76TN2180(1)30(2)
1,600	650	0.022	6.0	15.0	26.5	22.5	3,000	9,600,000	76TN2220(1)30(2)	R76TN2220(1)30(2)
1,600	650	0.027	6.0	15.0	26.5	22.5	3,000	9,600,000	76TN2270(1)30(2)	R76TN2270(1)30(2)
1,600	650	0.033	6.0	15.0	26.5	22.5	3,000	9,600,000	76TN2330(1)40(2)	R76TN2330(1)40(2)
1,600	650	0.039	7.0	16.0	26.5	22.5	3,000	9,600,000	76TN2390(1)40(2)	R76TN2390(1)40(2)
1,600	650	0.047	7.0	16.0	26.5	22.5	3,000	9,600,000	76TN2470(1)40(2)	R76TN2470(1)40(2)
1,600	650	0.056	8.5	17.0	26.5	22.5	3,000	9,600,000	76TN2560(1)40(2)	R76TN2560(1)40(2)
1,600	650	0.068	10.0	18.5	26.5	22.5	3,000	9,600,000	76TN2680(1)40(2)	R76TN2680(1)40(2)
1,600	650	0.082	10.0	18.5	26.5	22.5	3,000	9,600,000	76TN2820(1)40(2)	R76TN2820(1)40(2)
1,600	650	0.10	11.0	20.0	26.5	22.5	3,000	9,600,000	76TN3100(1)40(2)	R76TN3100(1)40(2)
1,600	650	0.039	9.0	17.0	32.0	27.5	2,000	6,400,000	76TR2390(1)30(2)	R76TR2390(1)30(2)
1,600	650	0.047	9.0	17.0	32.0	27.5	2,000	6,400,000	76TR2470(1)30(2)	R76TR2470(1)30(2)
1,600	650	0.056	9.0	17.0	32.0	27.5	2,000	6,400,000	76TR2560(1)30(2)	R76TR2560(1)30(2)
1,600	650	0.068	9.0	17.0	32.0	27.5	2,000	6,400,000	76TR2680(1)30(2)	R76TR2680(1)30(2)
1,600	650	0.082	11.0	20.0	32.0	27.5	2,000	6,400,000	76TR2820(1)30(2)	R76TR2820(1)30(2)
1,600	650	0.10	11.0	20.0	32.0	27.5	2,000	6,400,000	76TR3100(1)30(2)	R76TR3100(1)30(2)
1,600	650	0.12	13.0	22.0	32.0	27.5	2,000	6,400,000	76TR3120(1)30(2)	R76TR3120(1)30(2)
1,600	650	0.15	13.0	25.0	32.0	27.5	2,000	6,400,000	76TR3150(1)40(2)	R76TR3150(1)40(2)
1,600	650	0.18	14.0	28.0	32.0	27.5	2,000	6,400,000	76TR3180(1)40(2)	R76TR3180(1)40(2)
1,600	650	0.22	18.0	33.0	32.0	27.5	2,000	6,400,000	76TR3220(1)30(2)	R76TR3220(1)30(2)
1,600	650	0.27	18.0	33.0	32.0	27.5	2,000	6,400,000	76TR3270(1)30(2)	R76TR3270(1)30(2)
1,600	650	0.33	18.0	33.0	32.0	27.5	2,000	6,400,000	76TR3330(1)30(2)	R76TR3330(1)30(2)
1,600	650	0.39	22.0	37.0	32.0	27.5	2,000	6,400,000	76TR3390(1)30(2)	R76TR3390(1)30(2)
1,600	650	0.47	22.0	37.0	32.0	27.5	2,000	6,400,000	76TR3470(1)30(2)	R76TR3470(1)30(2)
1,600	650	0.082	11.0	22.0	41.5	37.5	1,200	3,840,000	76TW2820(1)30(2)	R76TW2820(1)30(2)
1,600	650	0.10	11.0	22.0	41.5	37.5	1,200	3,840,000	76TW3100(1)30(2)	R76TW3100(1)30(2)
1,600	650	0.12	11.0	22.0	41.5	37.5	1,200	3,840,000	76TW3120(1)30(2)	R76TW3120(1)30(2)
1,600	650	0.15	11.0	22.0	41.5	37.5	1,200	3,840,000	76TW3150(1)30(2)	R76TW3150(1)30(2)
1,600	650	0.18	13.0	24.0	41.5	37.5	1,200	3,840,000	76TW3180(1)30(2)	R76TW3180(1)30(2)
1,600	650	0.22	13.0	24.0	41.5	37.5	1,200	3,840,000	76TW3220(1)30(2)	R76TW3220(1)30(2)
1,600	650	0.27	13.0	24.0	41.5	37.5	1,200	3,840,000	76TW3270(1)30(2)	R76TW3270(1)30(2)
1,600	650	0.33	16.0	28.5	41.5	37.5	1,200	3,840,000	76TW3330(1)30(2)	R76TW3330(1)30(2)
1,600	650	0.39	16.0	28.5	41.5	37.5	1,200	3,840,000	76TW3390(1)30(2)	R76TW3390(1)30(2)
1,600	650	0.47	19.0	32.0	41.5	37.5	1,200	3,840,000	76TW3470(1)30(2)	R76TW3470(1)30(2)
1,600	650	0.56	20.0	40.0	41.5	37.5	1,200	3,840,000	76TW3560(1)30(2)	R76TW3560(1)30(2)
1,600	650	0.68	20.0	40.0	41.5	37.5	1,200	3,840,000	76TW3680(1)30(2)	R76TW3680(1)30(2)
1,600	650	0.82	24.0	44.0	41.5	37.5	1,200	3,840,000	76TW3820(1)30(2)	R76TW3820(1)30(2)
VDC	VAC	Capacitance Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

(2) H = 2.5%, J = 5%, K = 10%

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (μF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/μs)	Max K ₀ (V ² /μs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
1,600	650	1.0	24.0	44.0	41.5	37.5	1,200	3,840,000	76TW4100(1)30(2)	R76TW4100(1)30(2)
1,600	650	1.2	30.0	45.0	41.5	37.5	1,200	3,840,000	76TW4120(1)30(2)	R76TW4120(1)30(2)
2,000	700	0.00010	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI0100(1)40(2)	R76UI0100(1)40(2)
2,000	700	0.00012	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI0120(1)40(2)	R76UI0120(1)40(2)
2,000	700	0.00015	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI0150(1)40(2)	R76UI0150(1)40(2)
2,000	700	0.00018	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI0180(1)40(2)	R76UI0180(1)40(2)
2,000	700	0.00022	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI0220(1)40(2)	R76UI0220(1)40(2)
2,000	700	0.00022	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI0220(1)00(2)	R76UI0220(1)00(2)
2,000	700	0.00027	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI0270(1)40(2)	R76UI0270(1)40(2)
2,000	700	0.00027	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI0270(1)00(2)	R76UI0270(1)00(2)
2,000	700	0.00033	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI0330(1)40(2)	R76UI0330(1)40(2)
2,000	700	0.00033	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI0330(1)00(2)	R76UI0330(1)00(2)
2,000	700	0.00039	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI0390(1)40(2)	R76UI0390(1)40(2)
2,000	700	0.00039	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI0390(1)00(2)	R76UI0390(1)00(2)
2,000	700	0.00047	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI0470(1)40(2)	R76UI0470(1)40(2)
2,000	700	0.00047	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI0470(1)00(2)	R76UI0470(1)00(2)
2,000	700	0.00056	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI0560(1)40(2)	R76UI0560(1)40(2)
2,000	700	0.00056	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI0560(1)00(2)	R76UI0560(1)00(2)
2,000	700	0.00068	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI0680(1)40(2)	R76UI0680(1)40(2)
2,000	700	0.00068	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI0680(1)00(2)	R76UI0680(1)00(2)
2,000	700	0.00082	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI0820(1)40(2)	R76UI0820(1)40(2)
2,000	700	0.00082	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI0820(1)00(2)	R76UI0820(1)00(2)
2,000	700	0.0010	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI1100(1)40(2)	R76UI1100(1)40(2)
2,000	700	0.0010	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI1100(1)30(2)	R76UI1100(1)30(2)
2,000	700	0.0012	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI1120(1)40(2)	R76UI1120(1)40(2)
2,000	700	0.0012	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI1120(1)30(2)	R76UI1120(1)30(2)
2,000	700	0.0015	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI1150(1)40(2)	R76UI1150(1)40(2)
2,000	700	0.0015	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI1150(1)30(2)	R76UI1150(1)30(2)
2,000	700	0.0018	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI1180(1)40(2)	R76UI1180(1)40(2)
2,000	700	0.0018	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI1180(1)30(2)	R76UI1180(1)30(2)
2,000	700	0.0022	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI1220(1)40(2)	R76UI1220(1)40(2)
2,000	700	0.0022	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI1220(1)30(2)	R76UI1220(1)30(2)
2,000	700	0.0027	4.0	10.0	18.0	15.0	9,500	38,000,000	76UI1270(1)40(2)	R76UI1270(1)40(2)
2,000	700	0.0027	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI1270(1)30(2)	R76UI1270(1)30(2)
2,000	700	0.0033	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI1330(1)40(2)	R76UI1330(1)40(2)
2,000	700	0.0039	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI1390(1)40(2)	R76UI1390(1)40(2)
2,000	700	0.0047	5.0	11.0	18.0	15.0	9,500	38,000,000	76UI1470(1)40(2)	R76UI1470(1)40(2)
2,000	700	0.0056	6.0	12.0	18.0	15.0	9,500	38,000,000	76UI1560(1)40(2)	R76UI1560(1)40(2)
2,000	700	0.0068	6.0	12.0	18.0	15.0	9,500	38,000,000	76UI1680(1)40(2)	R76UI1680(1)40(2)
2,000	700	0.0082	6.0	12.0	18.0	15.0	9,500	38,000,000	76UI1820(1)40(2)	R76UI1820(1)40(2)
2,000	700	0.010	7.5	13.5	18.0	15.0	9,500	38,000,000	76UI2100(1)40(2)	R76UI2100(1)40(2)
2,000	700	0.010	13.0	12.0	18.0	15.0	9,500	38,000,000	76UI2100(1)70(2)	R76UI2100(1)70(2)
2,000	700	0.012	8.5	14.5	18.0	15.0	9,500	38,000,000	76UI2120(1)40(2)	R76UI2120(1)40(2)
2,000	700	0.015	8.5	14.5	18.0	15.0	9,500	38,000,000	76UI2150(1)40(2)	R76UI2150(1)40(2)
2,000	700	0.0010	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN1100(1)00(2)	R76UN1100(1)00(2)
2,000	700	0.0012	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN1120(1)00(2)	R76UN1120(1)00(2)
2,000	700	0.0015	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN1150(1)00(2)	R76UN1150(1)00(2)
2,000	700	0.0018	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN1180(1)00(2)	R76UN1180(1)00(2)
2,000	700	0.0022	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN1220(1)00(2)	R76UN1220(1)00(2)
2,000	700	0.0027	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN1270(1)00(2)	R76UN1270(1)00(2)
2,000	700	0.0033	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN1330(1)00(2)	R76UN1330(1)00(2)
2,000	700	0.0039	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN1390(1)00(2)	R76UN1390(1)00(2)
2,000	700	0.0047	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN1470(1)00(2)	R76UN1470(1)00(2)
2,000	700	0.0056	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN1560(1)00(2)	R76UN1560(1)00(2)
2,000	700	0.0068	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN1680(1)00(2)	R76UN1680(1)00(2)
2,000	700	0.0082	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN1820(1)30(2)	R76UN1820(1)30(2)
2,000	700	0.010	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN2100(1)30(2)	R76UN2100(1)30(2)
2,000	700	0.012	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN2120(1)30(2)	R76UN2120(1)30(2)
2,000	700	0.015	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN2150(1)40(2)	R76UN2150(1)40(2)
2,000	700	0.018	6.0	15.0	26.5	22.5	3,500	14,000,000	76UN2180(1)40(2)	R76UN2180(1)40(2)
VDC	VAC	Capacitance Value (μF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/μs)	Max K ₀ (V ² /μs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

(2) H = 2.5%, J = 5%, K = 10%

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
2,000	700	0.022	7.0	16.0	26.5	22.5	3,500	14,000,000	76UN2220(1)40(2)	R76UN2220(1)40(2)
2,000	700	0.027	7.0	16.0	26.5	22.5	3,500	14,000,000	76UN2270(1)40(2)	R76UN2270(1)40(2)
2,000	700	0.033	8.5	17.0	26.5	22.5	3,500	14,000,000	76UN2330(1)40(2)	R76UN2330(1)40(2)
2,000	700	0.039	10.0	18.5	26.5	22.5	3,500	14,000,000	76UN2390(1)40(2)	R76UN2390(1)40(2)
2,000	700	0.047	10.0	18.5	26.5	22.5	3,500	14,000,000	76UN2470(1)40(2)	R76UN2470(1)40(2)
2,000	700	0.056	11.0	20.0	26.5	22.5	3,500	14,000,000	76UN2560(1)40(2)	R76UN2560(1)40(2)
2,000	700	0.022	9.0	17.0	32.0	27.5	2,300	9,200,000	76UR2220(1)30(2)	R76UR2220(1)30(2)
2,000	700	0.027	9.0	17.0	32.0	27.5	2,300	9,200,000	76UR2270(1)30(2)	R76UR2270(1)30(2)
2,000	700	0.033	9.0	17.0	32.0	27.5	2,300	9,200,000	76UR2330(1)30(2)	R76UR2330(1)30(2)
2,000	700	0.039	9.0	17.0	32.0	27.5	2,300	9,200,000	76UR2390(1)40(2)	R76UR2390(1)40(2)
2,000	700	0.047	11.0	20.0	32.0	27.5	2,300	9,200,000	76UR2470(1)30(2)	R76UR2470(1)30(2)
2,000	700	0.056	13.0	22.0	32.0	27.5	2,300	9,200,000	76UR2560(1)30(2)	R76UR2560(1)30(2)
2,000	700	0.068	13.0	22.0	32.0	27.5	2,300	9,200,000	76UR2680(1)30(2)	R76UR2680(1)30(2)
2,000	700	0.082	13.0	25.0	32.0	27.5	2,300	9,200,000	76UR2820(1)40(2)	R76UR2820(1)40(2)
2,000	700	0.10	14.0	28.0	32.0	27.5	2,300	9,200,000	76UR3100(1)30(2)	R76UR3100(1)30(2)
2,000	700	0.12	18.0	33.0	32.0	27.5	2,300	9,200,000	76UR3120(1)30(2)	R76UR3120(1)30(2)
2,000	700	0.15	18.0	33.0	32.0	27.5	2,300	9,200,000	76UR3150(1)30(2)	R76UR3150(1)30(2)
2,000	700	0.18	22.0	37.0	32.0	27.5	2,300	9,200,000	76UR3180(1)30(2)	R76UR3180(1)30(2)
2,000	700	0.22	22.0	37.0	32.0	27.5	2,300	9,200,000	76UR3220(1)30(2)	R76UR3220(1)30(2)
2,000	700	0.033	11.0	22.0	41.5	37.5	1,500	6,000,000	76UW2330(1)30(2)	R76UW2330(1)30(2)
2,000	700	0.039	11.0	22.0	41.5	37.5	1,500	6,000,000	76UW2390(1)30(2)	R76UW2390(1)30(2)
2,000	700	0.047	11.0	22.0	41.5	37.5	1,500	6,000,000	76UW2470(1)30(2)	R76UW2470(1)30(2)
2,000	700	0.056	11.0	22.0	41.5	37.5	1,500	6,000,000	76UW2560(1)30(2)	R76UW2560(1)30(2)
2,000	700	0.068	11.0	22.0	41.5	37.5	1,500	6,000,000	76UW2680(1)30(2)	R76UW2680(1)30(2)
2,000	700	0.082	11.0	22.0	41.5	37.5	1,500	6,000,000	76UW2820(1)30(2)	R76UW2820(1)30(2)
2,000	700	0.10	13.0	24.0	41.5	37.5	1,500	6,000,000	76UW3100(1)30(2)	R76UW3100(1)30(2)
2,000	700	0.12	13.0	24.0	41.5	37.5	1,500	6,000,000	76UW3120(1)30(2)	R76UW3120(1)30(2)
2,000	700	0.15	16.0	28.5	41.5	37.5	1,500	6,000,000	76UW3150(1)30(2)	R76UW3150(1)30(2)
2,000	700	0.18	16.0	28.5	41.5	37.5	1,500	6,000,000	76UW3180(1)30(2)	R76UW3180(1)30(2)
2,000	700	0.22	19.0	32.0	41.5	37.5	1,500	6,000,000	76UW3220(1)30(2)	R76UW3220(1)30(2)
2,000	700	0.27	20.0	40.0	41.5	37.5	1,500	6,000,000	76UW3270(1)30(2)	R76UW3270(1)30(2)
2,000	700	0.33	20.0	40.0	41.5	37.5	1,500	6,000,000	76UW3330(1)30(2)	R76UW3330(1)30(2)
2,000	700	0.39	24.0	44.0	41.5	37.5	1,500	6,000,000	76UW3390(1)30(2)	R76UW3390(1)30(2)
2,000	700	0.47	24.0	44.0	41.5	37.5	1,500	6,000,000	76UW3470(1)30(2)	R76UW3470(1)30(2)
2,000	700	0.56	30.0	45.0	41.5	37.5	1,500	6,000,000	76UW3560(1)30(2)	R76UW3560(1)30(2)
2,000	700	0.68	30.0	45.0	41.5	37.5	1,500	6,000,000	76UW3680(1)30(2)	R76UW3680(1)30(2)
VDC	VAC	Capacitance Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

(2) H = 2.5%, J = 5%, K = 10%

Soldering Process

The implementation of the RoHS directive has resulted in the selection of SnAgCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183°C for SnPb eutectic alloy to 217 – 221°C for the new alloys. As a result, the heat stress to the components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (the melting point of polypropylene is 160 – 170°C). Wave soldering can be destructive, especially for mechanically small polypropylene capacitors (with lead spacing of 5 mm to 15 mm), and great care has to be taken during soldering. The recommended solder profiles from KEMET should be used. Please consult KEMET with any questions. In general, the wave soldering curve from IEC Publication 61760-1 Edition 2 serves as a solid guideline for successful soldering. Please see Figure 1.

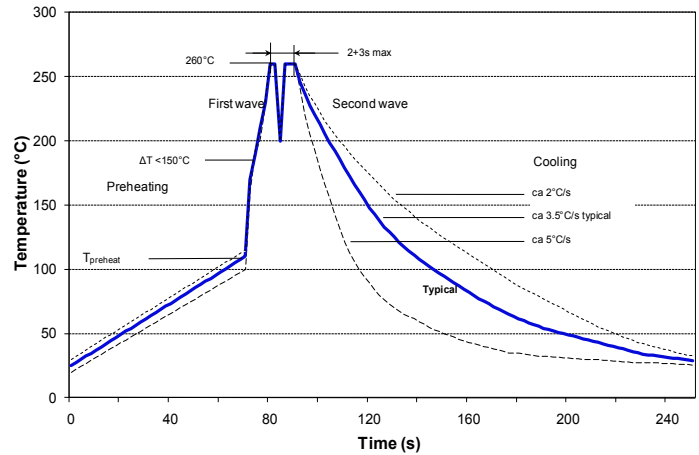
Reflow soldering is not recommended for through-hole film capacitors. Exposing capacitors to a soldering profile in excess of the above the recommended limits may result to degradation or permanent damage to the capacitors.

Do not place the polypropylene capacitor through an adhesive curing oven to cure resin for surface mount components. Insert through-hole parts after the curing of surface mount parts. Consult KEMET to discuss the actual temperature profile in the oven, if through-hole components must pass through the adhesive curing process. A maximum two soldering cycles is recommended. Please allow time for the capacitor surface temperature to return to a normal temperature before the second soldering cycle.

Figure 1

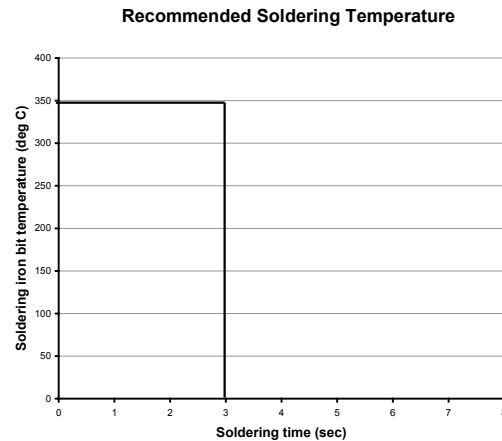
Dielectric Film Material	Maximum Preheat Temperature			Maximum Peak Soldering Temperature	
	Capacitor Lead Spacing <10 mm	Capacitor Lead Spacing = 15 mm	Capacitor Lead Spacing >15 mm	Capacitor Lead Spacing <15 mm	Capacitor Lead Spacing >15 mm
Polyester	130°C	130°C	130°C	270°C	270°C
Polypropylene	100°C	110°C	130°C	260°C	270°C
Polyphenylene Sulphide	150°C	150°C	160°C	270°C	270°C

Wave Soldering Recommendations



Manual Soldering Recommendations

Following is the recommendation for manual soldering with a soldering iron.



The soldering iron tip temperature should be set at 350°C (+10°C maximum) with the soldering duration not to exceed more than 3 seconds.

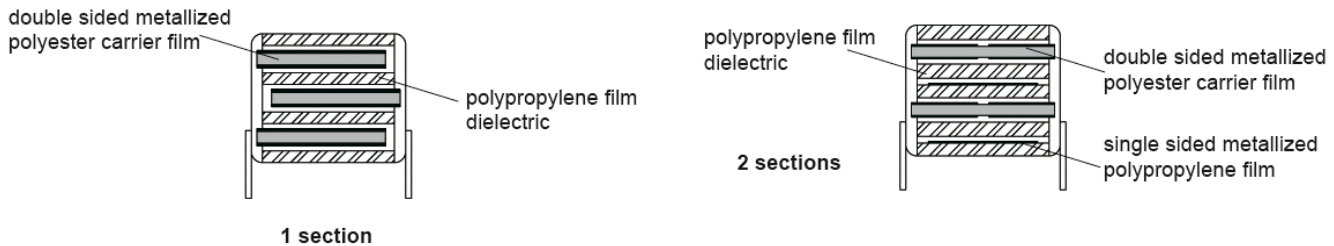
Soldering Process cont'd

Selective Soldering Recommendations

Selective dip soldering is a variation of reflow soldering. In this method, the printed circuit board with through-hole components to be soldered is preheated and transported over the solder bath as in normal flow soldering without touching the solder. When the board is over the bath, it is stopped and pre-designed solder pots are lifted from the bath with molten solder only at the places of the selected components, and pressed against the lower surface of the board to solder the components.

The temperature profile for selective soldering is similar to the double wave flow soldering outlined in this document, **however, instead of two baths, there is only one bath with a time from 3 to 10 seconds.** In selective soldering, the risk of overheating is greater than in double wave flow soldering, and great care must be taken so that the parts are not overheated.

Construction



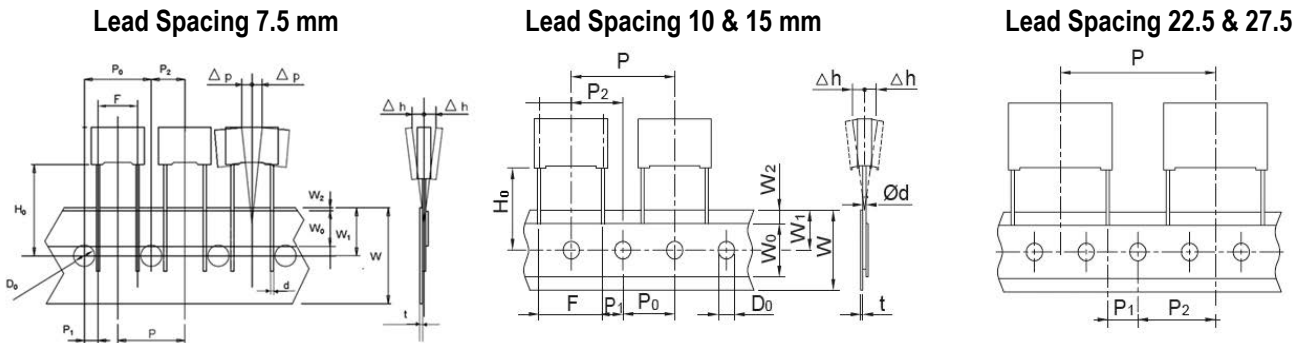
Marking

- KEMET's logo
- Series
- Dielectric code (MKP)
- Capacitance
- Capacitance tolerance
- Rated DC voltage
- Manufacturing date code

Packaging Quantities

Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 355 mm	Large Reel ø 500 mm	Ammo Taped
7.5	3.0	8.0	10.0	1,500	1,750	2,100		2,800
	4.0	9.0	10.0	2,000	1,500	1,500		2,100
	5.0	10.5	10.0	1,500	1,000	1,200		1,600
	6.0	12.0	10.5	1,000	800	1,000		1,350
10	4.0	9.0	13.0	2,000	1,800	750	1,500	1,000
	5.0	11.0	13.0	1,300	1,500	600	1,250	800
	6.0	12.0	13.0	1,000	1,200	500	1,000	680
15	4.0	10.0	18.0	2,500	1,500	-	1,500	1,000
	5.0	11.0	18.0	2,000	1,000	600	1,250	800
	6.0	12.0	18.0	1,750	900	500	1,000	680
	7.5	13.5	18.0	1,000	700	350	800	500
	8.5	14.5	18.0	1,000	500	300	700	440
	9.0	12.5	18.0	1,000	520	270	650	410
	10.0	16.0	18.0	750	500	300	600	380
	11.0	19.0	18.0	450	350	-	500	340
22.5	13.0	12.0	18.0	750	490	200	480	280
	6.0	15.0	26.5	805	500		700	464
	7.0	16.0	26.5	700	500		550	380
	8.5	17.0	26.5	468	300		450	280
	10.0	18.5	26.5	396	300		350	235
	11.0	20.0	26.5	360	250		350	217
27.5	13.0	22.0	26.5	300	200		300	-
	9.0	17.0	32.0	816	408		450	
	11.0	20.0	32.0	560	336		350	
	13.0	22.0	32.0	480	288		300	
	13.0	25.0	32.0	480	288			
	14.0	28.0	32.0	352	176			
	18.0	33.0	32.0	256	128			
37.5	22.0	37.0	32.0	168	112			
	11.0	22.0	41.5	420	252			
	13.0	24.0	41.5	360	216			
	16.0	28.5	41.5	216	108			
	19.0	32.0	41.5	192	96			
	20.0	40.0	41.5	126	84			
	24.0	44.0	41.5	108	72			
30.0	45.0	41.5	90	60				

Lead Taping & Packaging (IEC 60286-2)



Taping Specification

Description	Symbol	Dimensions (mm)					Tolerance
		Lead Spacing					
		7.5	10.0	15.0	22.5	27.5	
Lead wire diameter	d	0.5 - 0.6	0.6	0.6 - 0.8	0.8	0.8	±0.05
Taping lead space	P	12.7	25.4	25.4	38.1	38.1	±1
Feed hole lead space *	P ₀	12.7	12.7	12.7	12.7	12.7	±0.2 **
Centering of the lead wire	P ₁	2.6	7.7	5.2	7.8	5.3	±0.7
Centering of the body	P ₂	6.35	12.7	12.7	19.05	19.05	±1.3
Lead spacing ***	F	7.5	10.0	15.0	22.5	27.5	+0.6/-0.1
Component alignment	Δh	0	0	0	0	0	±2
Component deviation	Δp	0	0	0	0	0	±1
Height of component from tape center	H ₀ ****	18.5	18.5	18.5	18.5	18.5	±0.5
Carrier tape width	W	18	18	18	18	18	+1/-0.5
Hold down tape width	W ₀	6	9	10	10	10	Minimum
Hole position	W ₁	9	9	9	9	9	±0.5
Hold down tape position	W ₂	3	3	3	3	3	Maximum
Feed hole diameter	D ₀	4	4	4	4	4	±0.2
Tape thickness	t	0.7	0.7	0.7	0.7	0.7	±0.2

* Available also 15 mm.

** Maximum 1 mm on 20 lead spacing.

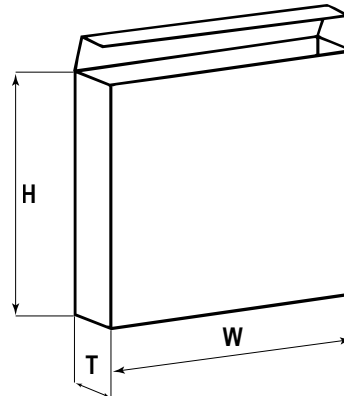
*** 15 mm and 10 mm taped to 7.5 mm (crimped leads) available upon request.

**** H₀ = 16.5 mm is available upon request.

Lead Taping & Packaging (IEC 60286–2) cont'd

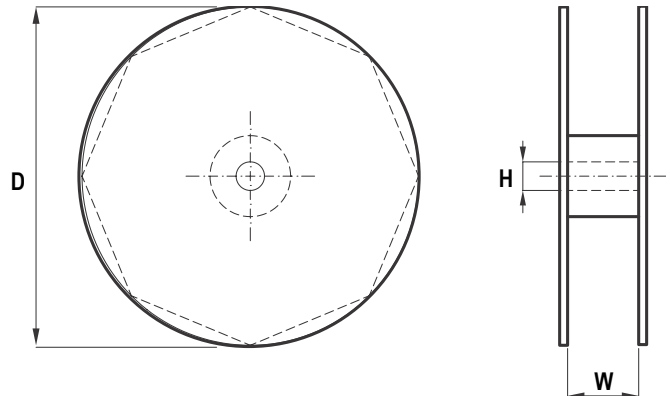
Ammo Specifications

Dimensions (mm)		
H	W	T
360	340	59



Reel Specifications

Dimensions (mm)		
D	H	W
355	30	55 Maximum
500	25	



Manufacturing Date Code (IEC–60062)

Y = Year, Z = Month			
Year	Code	Month	Code
2000	M	January	1
2001	N	February	2
2002	P	March	3
2003	R	April	4
2004	S	May	5
2005	T	June	6
2006	U	July	7
2007	V	August	8
2008	W	September	9
2009	X	October	0
2010	A	November	N
2011	B	December	D
2012	C		
2013	D		
2014	E		
2015	F		
2016	H		
2017	J		
2018	K		
2019	L		
2020	M		

KEMET Corporation World Headquarters

2835 KEMET Way
Simpsonville, SC 29681

Mailing Address:
P.O. Box 5928
Greenville, SC 29606

www.kemet.com
Tel: 864-963-6300
Fax: 864-963-6521

Corporate Offices
Fort Lauderdale, FL
Tel: 954-766-2800

North America

Southeast
Lake Mary, FL
Tel: 407-855-8886

Northeast
Wilmington, MA
Tel: 978-658-1663

Central
Novi, MI
Tel: 248-306-9353

West
Milpitas, CA
Tel: 408-433-9950

Mexico
Guadalajara, Jalisco
Tel: 52-33-3123-2141

Europe

Southern Europe
Paris, France
Tel: 33-1-4646-1006

Sasso Marconi, Italy
Tel: 39-051-939111

Central Europe
Landsberg, Germany
Tel: 49-8191-3350800

Kamen, Germany
Tel: 49-2307-438110

Northern Europe
Bishop's Stortford, United Kingdom
Tel: 44-1279-460122

Espoo, Finland
Tel: 358-9-5406-5000

Asia

Northeast Asia
Hong Kong
Tel: 852-2305-1168

Shenzhen, China
Tel: 86-755-2518-1306

Beijing, China
Tel: 86-10-5829-1711

Shanghai, China
Tel: 86-21-6447-0707

Taipei, Taiwan
Tel: 886-2-27528585

Southeast Asia
Singapore
Tel: 65-6586-1900

Penang, Malaysia
Tel: 60-4-6430200

Bangalore, India
Tel: 91-806-53-76817

Note: KEMET reserves the right to modify minor details of internal and external construction at any time in the interest of product improvement. KEMET does not assume any responsibility for infringement that might result from the use of KEMET Capacitors in potential circuit designs. KEMET is a registered trademark of KEMET Electronics Corporation.

Disclaimer

All product specifications, statements, information and data (collectively, the "Information") in this datasheet are subject to change. The customer is responsible for checking and verifying the extent to which the Information contained in this publication is applicable to an order at the time the order is placed.

All Information given herein is believed to be accurate and reliable, but it is presented without guarantee, warranty, or responsibility of any kind, expressed or implied.

Statements of suitability for certain applications are based on KEMET Electronics Corporation's ("KEMET") knowledge of typical operating conditions for such applications, but are not intended to constitute – and KEMET specifically disclaims – any warranty concerning suitability for a specific customer application or use. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by KEMET with reference to the use of KEMET's products is given gratis, and KEMET assumes no obligation or liability for the advice given or results obtained.

Although KEMET designs and manufactures its products to the most stringent quality and safety standards, given the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage.

Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated or that other measures may not be required.