

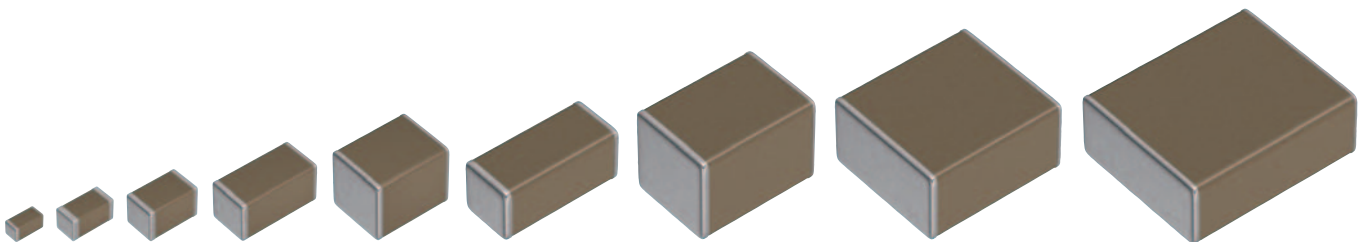
# 积层贴片陶瓷片式电容器

车载等级、树脂电极品

## CGA系列

CGA2	1005 [0402 inch]
CGA3	1608 [0603 inch]
CGA4	2012 [0805 inch]
CGA5	3216 [1206 inch]
CGA6	3225 [1210 inch]
CGA7	4520 [1808 inch]
CGA8	4532 [1812 inch]
CGA9	5750 [2220 inch]
CGAD	7563 [3025 inch]

\* 表示尺寸代码。JIS[EIA]



## 使用注意事项

在使用本产品前，请务必随附采购规格书。

## 安全注意事项

使用本产品时，请注意安全事项。

### 注意

1. 本目录中记载的产品、车载电子设备中标准的用途被使用，另外，该电子机器、意图，在通常的操作，使用方法中使用的。对于需要高度安全性和可靠性的，或者设备的故障，误动作，运转不良可能会给人的生命，身体及财产等造成损害，以及有可能产生莫大社会影响的以下用途（以下称‘特定用途’）中的适用性，性能发挥，品质，本公司不予保证。客户预定在本产品目录的范围，条件之外，或者在特定用途中使用，请事先咨询本公司相关部门。本公司会配合客户需求，一起协商不同于本产品目录中所记载的使用用途。

- |                  |                    |
|------------------|--------------------|
| (1) 航空，航天设备      | (8) 公共性的高度信息处理设备   |
| (2) 运输设备（电车，船舶等） | (9) 军用设备           |
| (3) 医疗设备         | (10) 电热用品，燃烧设备     |
| (4) 发电控制设备       | (11) 防灾防盗设备        |
| (5) 核动力相关设备      | (12) 各种安全装置        |
| (6) 海底设备         | (13) 其他被认定为特定用途的用途 |
| (7) 交通工具控制设备     |                    |

此外，对使用本产品目录中所记载产品的设备进行设计时，请确保符合该设备的使用用途及状态的保护回路和装置，并设置备用回路等。

2. 本产品目录中记载的产品因改良及其他原因可能在不经预告的情况下进行变更或停止供应。
3. 关于本产品目录中记载的产品，本公司备有记载了各产品的规格及安全注意事项的“交货规格书”。在选用产品时，建议签定交货规格书。
4. 在出口本产品目录中记载的产品时，有时会被归为“外汇及外贸管理法”中规定的管制货物等。在这种情况下，需要有依据该法规定的出口许可。
5. 关于本产品目录的内容，未经本公司许可不得擅自转载或复制。
6. 因使用本产品目录中记载的产品而发生涉及本公司或第三者的知识产权及其他权利的问题时，本公司对此将不承担责任。并且，本公司不对该等权利的实施权办理许可。
7. 本产品目录适用于从本公司或本公司的正规代理商购买的产品。从其他第三者购买的产品不在适用范围之内。

注意： 伴随网站的更新，由于系统限制的原因以及统一产品目录型号的需要，从2013年1月开始，TDK将在产品目录中使用新型号。新目录型号将在以后所有根据产品目录订货时使用，但不适用于OEM订购。目录型号的最后5位数与产品标签上的交货型号（内部控制编号）不同，请注意。详细信息请联系当地TDK销售代表。

（例）

产品目录发行日期	目录型号	交货型号（交货标签上的标识）
2012年12月以前	C1608C0G1E103J(080AA)	C1608C0G1E103JT000N
2013年1月及以后	C1608C0G1E103J080AA	C1608C0G1E103JT000N

# CGA 系列

## 树脂电极品



Type: CGA2/1005 [0402 inch]、CGA3/1608 [0603 inch]、CGA4/2012 [0805 inch]、  
CGA5/3216 [1206 inch]、CGA6/3225 [1210 inch]、CGA7/4520 [1808 inch]、  
CGA8/4532 [1812 inch]、CGA9/5750 [2220 inch]、CGAD/7563 [3025 inch]

### ■ 系列概要

TDK陶瓷贴片电容器/树脂电极品/车载等级/CGA系列，是在端子电极中加入具有柔软性导电性树脂层的产品，树脂层能吸收热冲击和基板弯曲应力，因此具有良好的对应机械应力和热冲击的能力。

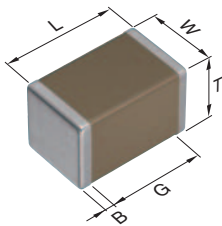
### ■ 特点

- 树脂电极构造带来良好的抗机械应力和热冲击特性。特别推荐大尺寸电容。
- 150°C 高温特性的X8R产品也可以对应。
- 温度特性和偏压特性稳定的COG品也可以对应。
- 符合AEC-Q200车载标准。

### ■ 应用

- 电池线用安全设计
- 工程内基板弯曲对策品
- 因热冲击所造成的焊接裂纹对应品
- 遥控门锁，智能锁等跌落风险高的产品

### ■ 形状与尺寸



L	主体长度
W	主体宽度
T	主体高度
B	端子宽度
G	端子间距

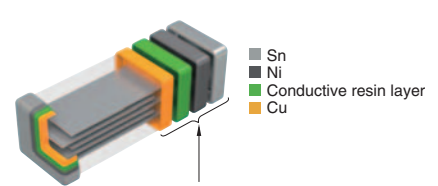
### ■ 电极结构图

通常端子品



端子电极由Cu, Ni, Sn3层组成。

树脂电极品



端子电极由包含导电性树脂层在内的4层组成。

Dimensions in mm

Type	L	W	T	B	G
CGA2	1.00+0.15,-0.05	0.50+0.10,-0.05	0.50+0.10,-0.05	0.10 min.	0.30 min.
CGA3	1.60+0.20,-0.10	0.80+0.15,-0.10	0.80+0.15,-0.10	0.20 min.	0.30 min.
CGA4	2.00+0.45,-0.20	1.25+0.25,-0.20	1.25+0.25,-0.20	0.20 min.	0.50 min.
CGA5	3.20+0.40,-0.20	1.60+0.30,-0.20	1.60+0.30,-0.20	0.20 min.	1.00 min.
CGA6	3.20+0.50,-0.40	2.50±0.30	2.50±0.30	0.20 min.	—
CGA7	4.50+0.50,-0.40	2.00+0.30,-0.20	1.30±0.20	0.20 min.	—
CGA8	4.50+0.50,-0.40	3.20±0.40	2.50±0.30	0.20 min.	—
CGA9	5.70+0.50,-0.40	5.00±0.40	2.50±0.30	0.20 min.	—
CGAD	7.50±0.50	6.30±0.50	2.50 max.	0.30 min.	—

\* 尺寸公差是代表价值。

## ■ 目录型号的识别法

<b>CGA</b>	<b>D</b>	<b>N</b>	<b>3</b>	<b>X7R</b>	<b>1E</b>	<b>476</b>	<b>M</b>	<b>230</b>	<b>L</b>	<b>E</b>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

## (1) 系列名称

## (2) 尺寸 L x W (mm)

代码	EIA	长度	宽度	端子宽度
2	CC0402	1.00	0.50	0.10
3	CC0603	1.60	0.80	0.20
4	CC0805	2.00	1.25	0.20
5	CC1206	3.20	1.60	0.20
6	CC1210	3.20	2.50	0.20
7	CC1808	4.50	2.00	0.20
8	CC1812	4.50	3.20	0.20
9	CC2220	5.70	5.00	0.20
D	CC3025	7.50	6.30	0.30

## (3) 厚度代码

代码	产品厚度
B	0.50 mm
C	0.60 mm
E	0.80 mm
F	0.85 mm
H	1.15 mm
J	1.25 mm
K	1.30 mm
L	1.60 mm
M	2.00 mm
N	2.30 mm
P	2.50 mm

## (4) 寿命试验的电压条件

代码	条件
1	1 × R.V.
2	2 × R.V.
3	1.5 × R.V.
4	1.2 × R.V.

## (5) 温度特性

温度特性	温度系数或电容变化率	温度范围
C0G	0±30 ppm/°C	-55 to +125°C
X7R	±15%	-55 to +125°C
X7S	±22%	-55 to +125°C
X7T	+22, -33%	-55 to +125°C
X8R	±15%	-55 to +150°C

## (6) 额定电压(DC)

代码	电压 (DC)
0J	6.3V
1A	10V
1C	16V
1E	25V
1V	35V
1H	50V
2A	100V
2E	250V
2W	450V
2J	630V
3A	1000V
3D	2000V
3F	3000V

## (7) 标称电容(pF)

容量以pF(微微法拉)为单位,并用三个文字表示。最初两个文字表示电容的第一位和第二位有效数字。第三个文字表示接在有效数字后的零的个数。含有小数点时用R表示。

(例) 0R5 = 0.5pF  
101 = 100pF  
225 = 2,200,000pF = 2.2μF

## (8) 电容容差

代码	容差
J	±5%
K	±10%
M	±20%

## (9) 厚度

代码	产品厚度
050	0.50 mm
060	0.60 mm
080	0.80 mm
085	0.85 mm
115	1.15 mm
125	1.25 mm
130	1.30 mm
160	1.60 mm
200	2.00 mm
230	2.30 mm
250	2.50 mm

## (10) 包装形式

代码	形式
A	178mm卷筒、4mm间距
B	178mm卷筒、2mm间距
K	178mm卷筒、8mm间距
L	330mm卷筒、12mm间距

## (11) 特殊指定代码

代码	内容
E	树脂电极品

## 电容范围图

## CGA2/1005 [0402 inch]

电容		C0G		X7R				X7S		X8R			
(pF)	代码	2A (100V)	1H (50V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1C (16V)	1A (10V)	2A (100V)	1H (50V)	1E (25V)	1C (16V)
100	101	■	■										
150	151	■	■							■	■		
220	221	■	■							■	■		
330	331	■	■							■	■		
470	471	■	■							■	■		
680	681	■	■							■	■		
1,000	102	■	■	■						■	■		
1,500	152	■	■							■	■		
2,200	222			■						■	■		
3,300	332			■						■	■		
4,700	472			■						■	■		
6,800	682			■						■	■	■	
10,000	103			■						■	■	■	
15,000	153			■						■	■	■	
22,000	223			■						■	■	■	
33,000	333			■						■	■	■	■
47,000	473			■						■	■	■	■
100,000	104			■						■	■	■	■
220,000	224				■	■	■						
470,000	474							■	■				

标准厚度 ■ 0.50 mm


■ 灰色涂层的品名，为新规设计非推荐品。

■ 关于产品厚度，静电容量公差等详细信息，请参照 P-11 以后的静电容量范围表。

## 电容范围图

## CGA3/1608 [0603 inch]

电容		C0G			X7R				X7S			X8R			
(pF)	代码	2E (250V)	2A (100V)	1H (50V)	2A (100V)	1H (50V)	1V (35V)	1E (25V)	2A (100V)	1C (16V)	1A (10V)	2A (100V)	1H (50V)	1E (25V)	1C (16V)
100	101														
330	331														
470	471														
680	681														
1,000	102														
1,200	122														
1,500	152														
1,800	182														
2,200	222														
2,700	272														
3,300	332														
3,900	392														
4,700	472														
5,600	562														
6,800	682														
8,200	822														
10,000	103														
15,000	153														
22,000	223														
33,000	333														
47,000	473														
68,000	683														
100,000	104														
150,000	154														
220,000	224														
330,000	334														
470,000	474														
1,000,000	105														
2,200,000	225														

标准厚度  0.8 mm 灰色涂层的品名，为新规设计非推荐品。

■关于产品厚度，静电容量公差等详细信息，请参照P-11以后的静电容量范围表。

## 电容范围图

## CGA4/2012 [0805 inch]

电容		C0G				X7R					X7S			
(pF)	代码	2W (450V)	2E (250V)	2A (100V)	1H (50V)	2E (250V)	2A (100V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	2A (100V)	1C (16V)	1A (10V)
100	101	0.60												
150	151	0.60												
220	221	0.60												
330	331	0.60												
470	471	0.60												
680	681	0.60												
1,000	102	0.60				0.85	0.85							
1,200	122	0.60				0.85	0.85							
1,500	152	0.60				0.85	0.85							
1,800	182	0.60				0.85	0.85							
2,200	222	0.60				0.85	0.85							
2,700	272	0.60				0.85	0.85							
3,300	332	0.60	0.85											
3,900	392	0.60	0.85											
4,700	472	0.60	0.85			0.85	0.85							
5,600	562		0.85											
6,800	682		0.85											
10,000	103					0.85	0.85							
15,000	153			0.85	0.85	0.85	0.85							
22,000	223			0.85	0.85	0.85	0.85							
33,000	333			0.85	0.85									
47,000	473							0.85						
100,000	104							0.85						
220,000	224							0.85			0.85			
470,000	474							0.85			0.85			
1,000,000	105							0.85	0.85			0.85		
2,200,000	225							0.85	0.85					
4,700,000	475							0.85	0.85					
10,000,000	106							0.85	0.85				0.85	0.85

电容		X7T		X8R			
(pF)	代码	2W (450V)	2E (250V)	2A (100V)	1H (50V)	1E (25V)	1C (16V)
10,000	103	0.85					
22,000	223	0.85		0.85			
33,000	333			0.85			
47,000	473	0.85	0.85	0.85			
68,000	683			0.85	0.85		
100,000	104		0.85		0.85		
150,000	154				0.85	0.85	
220,000	224				0.85	0.85	
330,000	334				0.85	0.85	
470,000	474				0.85	0.85	
680,000	684				0.85	0.85	0.85
1,000,000	105				0.85	0.85	0.85

标准厚度  0.60 mm  0.85 mm  1.25 mm

 灰色涂层的品名，为新规设计非推荐品。

■关于产品厚度，静电容量公差等详细信息，请参照P-11以后的静电容量范围表。

## 电容范围图

## CGA5/3216 [1206 inch]

电容		C0G					X7R							X7S
(pF)	代码	2J (630V)	2W (450V)	2E (250V)	2A (100V)	1H (50V)	2J (630V)	2E (250V)	2A (100V)	1H (50V)	1V (35V)	1E (25V)	0J (6.3V)	2A (100V)
1,000	102						■							
2,200	222						■							
3,300	332						■							
3,900	392	■					■							
4,700	472						■							
5,600	562	■					■							
6,800	682	■	■											
8,200	822	■	■											
10,000	103	■	■	■			■							
15,000	153			■										
22,000	223						■	■						
33,000	333						■							
47,000	473				■	■		■						
68,000	683				■	■								
100,000	104				■	■		■	■					
220,000	224								■					
470,000	474								■					
1,000,000	105								■	■				
2,200,000	225									■	■		■	
4,700,000	475										■		■	
10,000,000	106										■			
22,000,000	226											■		

电容		X7T			X8R			
(pF)	代码	2J (630V)	2W (450V)	2E (250V)	2A (100V)	1H (50V)	1E (25V)	1C (16V)
47,000	473	■						
100,000	104		■		■			
150,000	154				■			
220,000	224			■		■		
330,000	334				■			
470,000	474					■		
680,000	684						■	
1,000,000	105					■	■	
1,500,000	155							
2,200,000	225							
3,300,000	335							■
4,700,000	475							■

标准厚度 ■ 0.85 mm ■ 1.15 mm ■ 1.30 mm ■ 1.60 mm

■ 灰色涂层的品名，为新规设计非推荐品。

■ 关于产品厚度，静电容量公差等详细信息，请参照P-11以后的静电容量范围表。



## 电容范围图

## CGA6/3225 [1210 inch]

电容		C0G					X7R				X7S		X7T		
(pF)	代码	3A (1kV)	2J (630V)	2W (450V)	2E (250V)	2A (100V)	2J (630V)	2E (250V)	2A (100V)	1H (50V)	2A (100V)	1H (50V)	2J (630V)	2W (450V)	2E (250V)
1,000	102	■													
1,200	122	■													
1,500	152	■													
1,800	182	■													
2,200	222	■													
2,700	272	■													
3,300	332	■													
3,900	392	■													
4,700	472	■													
5,600	562	■													
6,800	682	■													
8,200	822	■													
15,000	153		■												
22,000	223		■		■										
33,000	333		■	■			■								
47,000	473						■								
68,000	683					■		■							
100,000	104							■				■			
150,000	154														
220,000	224							■					■		
330,000	334													■	
470,000	474								■						
1,000,000	105								■						
2,200,000	225								■	■					
3,300,000	335									■					
4,700,000	475										■	■			
10,000,000	106											■	■		

电容		X8R		
(pF)	代码	2A (100V)	1E (25V)	1C (16V)
470,000	474	■		
680,000	684	■		
3,300,000	335		■	
4,700,000	475		■	
10,000,000	106		■	■

标准厚度 ■ 1.60 mm ■ 2.00 mm ■ 2.30 mm ■ 2.50 mm


■关于产品厚度, 静电容量公差等详细信息, 请参照P-11以后的静电容量范围表。

## 电容范围图

## CGA7/4520 [1808 inch]

电容		X7R
(pF)	代码	3D (2kV)
1,000	102	









标准厚度





 1.30 mm

■关于产品厚度, 静电容量公差等详细信息, 请参照P-11以后的静电容量范围表。

## 电容范围图

## CGA8/4532 [1812 inch]










电容		C0G			X7R			X7T		
(pF)	代码	3F (3kV)	2J (630V)	3D (2kV)	2J (630V)	2E (250V)	2J (630V)	2W (450V)	2E (250V)	
330	331									
2,200	222									
33,000	333									
100,000	104									
220,000	224									
470,000	474									
1,000,000	105									



标准厚度  1.30 mm  2.00 mm  2.30 mm  2.50 mm

■关于产品厚度, 静电容量公差等详细信息, 请参照P-11以后的静电容量范围表。

## 电容范围图

## CGA9/5750 [2220 inch]

电容		C0G			X7R		X7S	X7T		
(pF)	代码	2J (630V)	2E (250V)	2A (100V)	2J (630V)	2E (250V)	2A (100V)	2J (630V)	2W (450V)	2E (250V)
68,000	683									
150,000	154									
220,000	224									
470,000	474									
1,000,000	105									
2,200,000	225									
10,000,000	106									

标准厚度  2.30 mm  2.50 mm


■关于产品厚度, 静电容量公差等详细信息, 请参照P-11以后的静电容量范围表。

## 电容范围图

## CGAD/7563 [3025 inch]

电容		X7R
(pF)	代码	1E (25V)
47,000,000	476	

标准厚度

 2.30 mm

■关于产品厚度, 静电容量公差等详细信息, 请参照P-11以后的静电容量范围表。

## MULTILAYER CERAMIC CHIP CAPACITORS



## 电容范围表

温度特性:COG (-55 to +125°C、0±30ppm/°C)

电容	尺寸	厚度 (mm)	电容容差	目录型号			
				额定电压 Edc: 3kV	额定电压 Edc: 1kV	额定电压 Edc: 630V	额定电压 Edc: 450V
100pF	2012	0.60±0.15	±5%				CGA4C4C0G2W101J060AE
150pF	2012	0.60±0.15	±5%				CGA4C4C0G2W151J060AE
220pF	2012	0.60±0.15	±5%				CGA4C4C0G2W221J060AE
330pF	2012	0.60±0.15	±5%				CGA4C4C0G2W331J060AE
	4532	2.50±0.30	±10%	CGA8P1C0G3F331K250KE			
470pF	2012	0.60±0.15	±5%				CGA4C4C0G2W471J060AE
680pF	2012	0.60±0.15	±5%				CGA4C4C0G2W681J060AE
1nF	2012	0.60±0.15	±5%				CGA4C4C0G2W102J060AE
	3225	2.00+0.30,-0.20	±5%	CGA6M1C0G3A102J200AE			
1.2nF	2012	0.60±0.15	±5%				CGA4C4C0G2W122J060AE
	3225	2.00+0.30,-0.20	±5%	CGA6M1C0G3A122J200AE			
1.5nF	2012	0.85±0.15	±5%				CGA4F4C0G2W152J085AE
	3225	2.00+0.30,-0.20	±5%	CGA6M1C0G3A152J200AE			
1.8nF	2012	0.85±0.15	±5%				CGA4F4C0G2W182J085AE
	3225	2.00+0.30,-0.20	±5%	CGA6M1C0G3A182J200AE			
2.2nF	2012	0.85±0.15	±5%				CGA4F4C0G2W222J085AE
	3225	2.00+0.30,-0.20	±5%	CGA6M1C0G3A222J200AE			
2.7nF	2012	1.25+0.25,-0.20	±5%				CGA4J4C0G2W272J125AE
	3225	2.00+0.30,-0.20	±5%	CGA6M1C0G3A272J200AE			
3.3nF	2012	1.25+0.25,-0.20	±5%				CGA4J4C0G2W332J125AE
	3225	2.00+0.30,-0.20	±5%	CGA6M1C0G3A332J200AE			
3.9nF	2012	1.25+0.25,-0.20	±5%				CGA4J4C0G2W392J125AE
	3216	0.85±0.15	±5%				CGA5F4C0G2J392J085AE
4.7nF	3225	2.00+0.30,-0.20	±5%	CGA6M1C0G3A392J200AE			
	3216	1.15±0.15	±5%				CGA5H4C0G2J562J115AE
5.6nF	3225	2.00+0.30,-0.20	±5%	CGA6M1C0G3A562J200AE			
	3216	1.15±0.15	±5%				CGA5H4C0G2J682J115AE
6.8nF	3225	2.00+0.30,-0.20	±5%	CGA6M1C0G3A682J200AE			
	3216	1.15±0.15	±5%				CGA5H4C0G2W822J115AE
8.2nF	3225	1.60+0.30,-0.20	±5%				CGA5L4C0G2J822J160AE
	3216	1.60+0.30,-0.20	±5%	CGA6N1C0G3A822J230AE			
10nF	3216	1.60+0.30,-0.20	±5%				CGA5L4C0G2J103J160AE
15nF	3225	1.60+0.30,-0.20	±5%				CGA6L4C0G2J153J160AE
	3216	2.50±0.30	±5%				CGA6P4C0G2J333J250AE
33nF	4532	2.00+0.30,-0.20	±5%	CGA8M4C0G2J333J200KE			
	5750	2.30+0.30,-0.20	±5%	CGA9N1C0G2J683J230KE			

⚠ 为了能够更加正确、安全地使用产品，请务必索取能进一步确认详细特性、规格的采购规格书。  
 记载内容可能因为产品改良等原因不经预告而更改，恕不另行通知。

电容范围表

温度特性: C0G (-55 to +125°C、0±30ppm/°C)

电容	尺寸	厚度 (mm)	电容容差	目录型号		
				额定电压 Edc: 250V	额定电压 Edc: 100V	额定电压 Edc: 50V
100pF	1005	0.50+0.10,-0.05	±5%		CGA2B2C0G2A101J050BE	CGA2B2C0G1H101J050BE
	1608	0.80+0.15,-0.10	±5%			CGA3E2C0G1H101J080AE
150pF	1005	0.50+0.10,-0.05	±5%		CGA2B2C0G2A151J050BE	CGA2B2C0G1H151J050BE
220pF	1005	0.50+0.10,-0.05	±5%		CGA2B2C0G2A221J050BE	CGA2B2C0G1H221J050BE
330pF	1005	0.50+0.10,-0.05	±5%		CGA2B2C0G2A331J050BE	CGA2B2C0G1H331J050BE
	1608	0.80+0.15,-0.10	±5%		CGA3E2C0G2A331J080AE	CGA3E2C0G1H331J080AE
470pF	1005	0.50+0.10,-0.05	±5%		CGA2B2C0G2A471J050BE	CGA2B2C0G1H471J050BE
	1608	0.80+0.15,-0.10	±5%		CGA3E2C0G2A471J080AE	CGA3E2C0G1H471J080AE
680pF	1005	0.50+0.10,-0.05	±5%		CGA2B1C0G2A681J050BE	CGA2B2C0G1H681J050BE
	1608	0.80+0.15,-0.10	±5%		CGA3E2C0G2A681J080AE	CGA3E2C0G1H681J080AE
1nF	1005	0.50+0.10,-0.05	±5%		CGA2B1C0G2A102J050BE	CGA2B2C0G1H102J050BE
	1608	0.80+0.15,-0.10	±5%	CGA3E3C0G2E102J080AE	CGA3E2C0G2A102J080AE	CGA3E2C0G1H102J080AE
1.2nF	1608	0.80+0.15,-0.10	±5%	CGA3E3C0G2E122J080AE	CGA3E2C0G2A122J080AE	CGA3E2C0G1H122J080AE
1.5nF	1608	0.80+0.15,-0.10	±5%	CGA3E3C0G2E152J080AE	CGA3E2C0G2A152J080AE	CGA3E2C0G1H152J080AE
1.8nF	1608	0.80+0.15,-0.10	±5%	CGA3E3C0G2E182J080AE	CGA3E2C0G2A182J080AE	CGA3E2C0G1H182J080AE
2.2nF	1608	0.80+0.15,-0.10	±5%		CGA3E2C0G2A222J080AE	CGA3E2C0G1H222J080AE
	1608	0.80+0.15,-0.10	±5%		CGA3E2C0G2A272J080AE	CGA3E2C0G1H272J080AE
3.3nF	1608	0.80+0.15,-0.10	±5%		CGA3E2C0G2A332J080AE	CGA3E2C0G1H332J080AE
	2012	0.85±0.15	±5%	CGA4F3C0G2E332J085AE		
3.9nF	1608	0.80+0.15,-0.10	±5%		CGA3E1C0G2A392J080AE	CGA3E2C0G1H392J080AE
	2012	1.25+0.25,-0.20	±5%	CGA4J3C0G2E392J125AE		
4.7nF	1608	0.80+0.15,-0.10	±5%		CGA3E1C0G2A472J080AE	CGA3E2C0G1H472J080AE
	2012	1.25+0.25,-0.20	±5%	CGA4J3C0G2E472J125AE		
5.6nF	1608	0.80+0.15,-0.10	±5%		CGA3E1C0G2A562J080AE	CGA3E2C0G1H562J080AE
	2012	1.25+0.25,-0.20	±5%	CGA4J3C0G2E562J125AE		
6.8nF	1608	0.80+0.15,-0.10	±5%		CGA3E1C0G2A682J080AE	CGA3E2C0G1H682J080AE
	2012	1.25+0.25,-0.20	±5%	CGA4J3C0G2E682J125AE		
8.2nF	1608	0.80+0.15,-0.10	±5%		CGA3E1C0G2A822J080AE	CGA3E2C0G1H822J080AE
	1608	0.80+0.15,-0.10	±5%		CGA3E1C0G2A103J080AE	CGA3E2C0G1H103J080AE
10nF	3216	1.15±0.15	±5%	CGA5H3C0G2E103J115AE		
	2012	0.85±0.15	±5%		CGA4F1C0G2A153J085AE	CGA4F2C0G1H153J085AE
15nF	3216	1.60+0.30,-0.20	±5%	CGA5L3C0G2E153J160AE		
	2012	1.25+0.25,-0.20	±5%		CGA4J1C0G2A223J125AE	CGA4J2C0G1H223J125AE
22nF	3225	1.60+0.30,-0.20	±5%	CGA6L3C0G2E223J160AE		
	2012	1.25+0.25,-0.20	±5%		CGA4J1C0G2A333J125AE	CGA4J2C0G1H333J125AE
33nF	2012	1.25+0.25,-0.20	±5%		CGA4J1C0G2A473J115AE	CGA4J2C0G1H473J115AE
47nF	3216	1.15±0.15	±5%		CGA5H1C0G2A683J160AE	CGA5H2C0G1H683J160AE
	3225	2.30+0.30,-0.20	±5%		CGA6N2C0G2A683J230AE	
68nF	3216	1.60+0.30,-0.20	±5%		CGA5L1C0G2A104J160AE	CGA5L2C0G1H104J160AE
	3225	2.30+0.30,-0.20	±5%			
100nF	3216	1.60+0.30,-0.20	±5%			
150nF	5750	2.30+0.30,-0.20	±5%	CGA9N4C0G2E154J230KE	CGA9N2C0G2A154J230KE	

⚠ 为了能够更加正确、安全地使用产品，请务必索取能进一步确认详细特性、规格的采购规格书。  
 记载内容可能因为产品改良等原因不经预告而更改，恕不另行通知。

MULTILAYER CERAMIC CHIP CAPACITORS TDK

电容范围表

温度特性: X7R (-55 to +125°C、±15%)

电容	尺寸	厚度 (mm)	电容容差	目录型号				
				额定电压 Edc: 2kV	额定电压 Edc: 630V	额定电压 Edc: 250V	额定电压 Edc: 100V	额定电压 Edc: 50V
1nF	1005	0.50+0.10,-0.05	±10%					CGA2B2X7R1H102K050BE
			±20%					CGA2B2X7R1H102M050BE
	1608	0.80 +0.15,-0.10	±10%				CGA3E2X7R2A102K080AE	CGA3E2X7R1H102K080AE
			±20%				CGA3E2X7R2A102M080AE	CGA3E2X7R1H102M080AE
	2012	0.85±0.15	±10%			CGA4F3X7R2E102K085AE	CGA4F2X7R2A102K085AE	
			±20%			CGA4F3X7R2E102M085AE	CGA4F2X7R2A102M085AE	
3216	1.15±0.15	±10%		CGA5H4X7R2J102K115AE				
		±20%		CGA5H4X7R2J102M115AE				
4520	1.30±0.20	±10%	CGA7K1X7R3D102K130KE					
		±20%	CGA7K1X7R3D102M130KE					
2.2nF	1005	0.50+0.10,-0.05	±10%					CGA2B2X7R1H222K050BE
			±20%					CGA2B2X7R1H222M050BE
	1608	0.80+0.15,-0.10	±10%				CGA3E2X7R2A222K080AE	CGA3E2X7R1H222K080AE
			±20%				CGA3E2X7R2A222M080AE	CGA3E2X7R1H222M080AE
	2012	0.85±0.15	±10%			CGA4F3X7R2E222K085AE	CGA4F2X7R2A222K085AE	
			±20%			CGA4F3X7R2E222M085AE	CGA4F2X7R2A222M085AE	
3216	1.15±0.15	±10%		CGA5H4X7R2J222K115AE				
		±20%		CGA5H4X7R2J222M115AE				
4532	1.30±0.20	±10%	CGA8K1X7R3D222K130KE					
		±20%	CGA8K1X7R3D222M130KE					
3.3nF	3216	1.15±0.15	±10%		CGA5H4X7R2J332K115AE			
			±20%		CGA5H4X7R2J332M115AE			
4.7nF	1005	0.50+0.10,-0.05	±10%					CGA2B2X7R1H472K050BE
			±20%					CGA2B2X7R1H472M050BE
	1608	0.80+0.15,-0.10	±10%				CGA3E2X7R2A472K080AE	CGA3E2X7R1H472K080AE
			±20%				CGA3E2X7R2A472M080AE	CGA3E2X7R1H472M080AE
	2012	0.85±0.15	±10%			CGA4F3X7R2E472K085AE	CGA4F2X7R2A472K085AE	
			±20%			CGA4F3X7R2E472M085AE	CGA4F2X7R2A472M085AE	
3216	1.15±0.15	±10%		CGA5H4X7R2J472K115AE				
		±20%		CGA5H4X7R2J472M115AE				
10nF	1005	0.50+0.10,-0.05	±10%					CGA2B3X7R1H103K050BE
			±20%					CGA2B3X7R1H103M050BE
	1608	0.80 +0.15,-0.10	±10%				CGA3E2X7R2A103K080AE	CGA3E2X7R1H103K080AE
			±20%				CGA3E2X7R2A103M080AE	CGA3E2X7R1H103M080AE
	2012	0.85±0.15	±10%				CGA4F2X7R2A103K085AE	
			±20%				CGA4F2X7R2A103M085AE	
3216	1.15±0.15	±10%		CGA5H4X7R2J103K115AE				
		±20%		CGA5H4X7R2J103M115AE				
22nF	1005	0.50+0.10,-0.05	±10%					CGA2B3X7R1H223K050BE
			±20%					CGA2B3X7R1H223M050BE
	1608	0.80+0.15,-0.10	±10%				CGA3E2X7R2A223K080AE	CGA3E2X7R1H223K080AE
			±20%				CGA3E2X7R2A223M080AE	CGA3E2X7R1H223M080AE
	2012	1.25 +0.25,-0.20	±10%			CGA4J3X7R2E223K125AE	CGA4J2X7R2A223K125AE	
			±20%			CGA4J3X7R2E223M125AE	CGA4J2X7R2A223M125AE	
3216	1.15±0.15	±10%		CGA5H3X7R2E223K115AE				
		±20%		CGA5H3X7R2E223M115AE				
3216	1.30±0.20	±10%		CGA5K4X7R2J223K130AE				
		±20%		CGA5K4X7R2J223M130AE				
33nF	3216	1.60+0.30,-0.20	±10%		CGA5L4X7R2J333K160AE			
			±20%		CGA5L4X7R2J333M160AE			

■ 灰色涂层的品名, 为新规设计非推荐品。

⚠ 为了能够更加正确、安全地使用产品, 请务必索取能进一步确认详细特性、规格的采购规格书。  
 记载内容可能因为产品改良等原因不经预告而更改, 恕不另行通知。

## 电容范围表

温度特性: X7R (-55 to +125°C、±15%)

电容	尺寸	厚度 (mm)	电容容差	目录型号			
				额定电压 Edc: 630V	额定电压 Edc: 250V	额定电压 Edc: 100V	额定电压 Edc: 50V
47nF	1005	0.50+0.10,-0.05	±10%				CGA2B3X7R1H473K050BE
			±20%				CGA2B3X7R1H473M050BE
	1608	0.80+0.15,-0.10	±10%				CGA3E2X7R1H473K080AE
			±20%				CGA3E2X7R1H473M080AE
	2012	1.25+0.25,-0.20	±10%			CGA4J2X7R2A473K125AE	
			±20%			CGA4J2X7R2A473M125AE	
3216	1.60+0.30,-0.20	±10%		CGA5L3X7R2E473K160AE			
		±20%		CGA5L3X7R2E473M160AE			
3225	2.00+0.30,-0.20	±10%	CGA6M4X7R2J473K200AE				
		±20%	CGA6M4X7R2J473M200AE				
68nF	3225	2.00+0.30,-0.20	±10%	CGA6M4X7R2J683K200AE			
			±20%	CGA6M4X7R2J683M200AE			
100nF	1005	0.50+0.10,-0.05	±10%				CGA2B3X7R1H104K050BE
			±20%				CGA2B3X7R1H104M050BE
	1608	0.80+0.15,-0.10	±10%				CGA3E2X7R1H104K080AE
			±20%				CGA3E2X7R1H104M080AE
	2012	1.25+0.25,-0.20	±10%			CGA4J2X7R2A104K125AE	CGA4J2X7R1H104K125AE
			±20%			CGA4J2X7R2A104M125AE	CGA4J2X7R1H104M125AE
	3216	1.60+0.30,-0.20	±10%	CGA5L3X7R2E104K160AE	CGA5L2X7R2A104K160AE		
			±20%	CGA5L3X7R2E104M160AE	CGA5L2X7R2A104M160AE		
	3225	2.00+0.30,-0.20	±10%	CGA6M3X7R2E104K200AE			
			±20%	CGA6M3X7R2E104M200AE			
4532	2.30+0.30,-0.20	±10%	CGA8N4X7R2J104K230KE				
		±20%	CGA8N4X7R2J104M230KE				
220nF	1608	0.80+0.15,-0.10	±10%				CGA3E3X7R1H224K080AE
			±20%				CGA3E3X7R1H224M080AE
	2012	1.25+0.25,-0.20	±10%				CGA4J2X7R1H224K125AE
			±20%				CGA4J2X7R1H224M125AE
	3216	1.15±0.15	±10%			CGA5H2X7R2A224K115AE	
			±20%			CGA5H2X7R2A224M115AE	
	3225	2.00+0.30,-0.20	±10%	CGA6M3X7R2E224K200AE			
			±20%	CGA6M3X7R2E224M200AE			
5750	2.30+0.30,-0.20	±10%	CGA9N4X7R2J224K230KE				
		±20%	CGA9N4X7R2J224M230KE				
470nF	1608	0.80+0.15,-0.10	±10%				CGA3E3X7R1H474K080AE
			±20%				CGA3E3X7R1H474M080AE
	2012	1.25+0.25,-0.20	±10%				CGA4J3X7R1H474K125AE
			±20%				CGA4J3X7R1H474M125AE
	3216	1.60+0.30,-0.20	±10%			CGA5L2X7R2A474K160AE	
			±20%			CGA5L2X7R2A474M160AE	
3225	2.00+0.30,-0.20	±10%			CGA6M2X7R2A474K200AE		
		±20%			CGA6M2X7R2A474M200AE		
4532	2.30+0.30,-0.20	±10%	CGA8N3X7R2E474K230KE				
		±20%	CGA8N3X7R2E474M230KE				
1µF	2012	1.25+0.25,-0.20	±10%				CGA4J3X7R1H105K125AE
			±20%				CGA4J3X7R1H105M125AE
	3216	1.60+0.30,-0.20	±10%			CGA5L2X7R2A105K160AE	CGA5L3X7R1H105K160AE
			±20%			CGA5L2X7R2A105M160AE	CGA5L3X7R1H105M160AE
	3225	1.60+0.30,-0.20	±10%			CGA6L2X7R1H105K160AE	
			±20%			CGA6L2X7R1H105M160AE	
	3225	2.00+0.30,-0.20	±10%			CGA6M2X7R2A105K200AE	
			±20%			CGA6M2X7R2A105M200AE	
5750	2.30+0.30,-0.20	±10%	CGA9N3X7R2E105K230KE				
		±20%	CGA9N3X7R2E105M230KE				
2.2µF	2012	1.25+0.25,-0.20	±10%				CGA4J3X7R1H225K125AE
			±20%				CGA4J3X7R1H225M125AE
	3216	1.60+0.30,-0.20	±10%			CGA5L3X7R1H225K160AE	
			±20%			CGA5L3X7R1H225M160AE	
	3225	2.00+0.30,-0.20	±10%			CGA6M3X7R1H225K200AE	
			±20%			CGA6M3X7R1H225M200AE	
3225	2.30+0.30,-0.20	±10%			CGA6N3X7R2A225K230AE		
		±20%			CGA6N3X7R2A225M230AE		
4.7µF	3216	1.60+0.30,-0.20	±10%				CGA5L3X7R1H475K160AE
			±20%				CGA5L3X7R1H475M160AE

⚠ 为了能够更加正确、安全地使用产品，请务必索取能进一步确认详细特性、规格的采购规格书。  
 记载内容可能因为产品改良等原因不经预告而更改，恕不另行通知。

## MULTILAYER CERAMIC CHIP CAPACITORS



## 电容范围表

温度特性: X7R (-55 to +125°C、±15%)

电容	尺寸	厚度 (mm)	电容容差	目录型号			
				额定电压 Edc: 35V	额定电压 Edc: 25V	额定电压 Edc: 16V	额定电压 Edc: 6.3V
220nF	1005	0.50+0.10,-0.05	±10%	CGA2B1X7R1V224K050BE	CGA2B3X7R1E224K050BE	CGA2B2X7R1C224K050BE	
			±20%	CGA2B1X7R1V224M050BE	CGA2B3X7R1E224M050BE	CGA2B2X7R1C224M050BE	
	1608	0.80+0.15,-0.10	±10%	CGA3E3X7R1V224K080AE			
			±20%	CGA3E3X7R1V224M080AE			
470nF	1608	0.80+0.15,-0.10	±10%	CGA3E1X7R1V474K080AE	CGA3E3X7R1E474K080AE		
			±20%	CGA3E1X7R1V474M080AE	CGA3E3X7R1E474M080AE		
1μF	1608	0.80+0.15,-0.10	±10%	CGA3E1X7R1V105K080AE	CGA3E1X7R1E105K080AE		
			±20%	CGA3E1X7R1V105M080AE	CGA3E1X7R1E105M080AE		
	2012	1.25+0.25,-0.20	±10%	CGA4J3X7R1V105K125AE			
			±20%	CGA4J3X7R1V105M125AE			
2.2μF	2012	1.25+0.25,-0.20	±10%	CGA4J1X7R1V225K125AE	CGA4J3X7R1E225K125AE		
			±20%	CGA4J1X7R1V225M125AE	CGA4J3X7R1E225M125AE		
	3216	1.60+0.30,-0.20	±10%	CGA5L3X7R1V225K160AE	CGA5L2X7R1E225K160AE		
			±20%	CGA5L3X7R1V225M160AE	CGA5L2X7R1E225M160AE		
4.7μF	2012	1.25+0.25,-0.20	±10%	CGA4J1X7R1V475K125AE	CGA4J1X7R1E475K125AE	CGA4J3X7R1C475K125AE	
			±20%	CGA4J1X7R1V475M125AE	CGA4J1X7R1E475M125AE	CGA4J3X7R1C475M125AE	
	3216	1.60+0.30,-0.20	±10%	CGA5L1X7R1V475K160AE			
			±20%	CGA5L1X7R1V475M160AE			
10μF	3216	1.60+0.30,-0.20	±10%	CGA5L1X7R1V106K160AE	CGA5L1X7R1E106K160AE		
			±20%	CGA5L1X7R1V106M160AE	CGA5L1X7R1E106M160AE		
22μF	3216	1.60+0.30,-0.20	±20%				CGA5L1X7R0J226M160AE
47nF	7563	2.30 (2.50max.)	±20%		CGADN3X7R1E476M230LE		

## 电容范围表

温度特性: X7S (-55 to +125°C、±22%)

电容	尺寸	厚度 (mm)	电容容差	目录型号			
				额定电压 Edc: 100V	额定电压 Edc: 50V	额定电压 Edc: 16V	额定电压 Edc: 10V
47nF	1608	0.80+0.15,-0.10	±10%	CGA3E3X7S2A473K080AE			
			±20%	CGA3E3X7S2A473M080AE			
100nF	1608	0.80+0.15,-0.10	±10%	CGA3E3X7S2A104K080AE			
			±20%	CGA3E3X7S2A104M080AE			
220nF	2012	0.85±0.15	±10%	CGA4F3X7S2A224K085AE			
			±20%	CGA4F3X7S2A224M085AE			
470nF	1005	0.50+0.10,-0.05	±10%			CGA2B1X7S1C474K050BE	CGA2B3X7S1A474K050BE
			±20%			CGA2B1X7S1C474M050BE	CGA2B3X7S1A474M050BE
	2012	1.25+0.25,-0.20	±10%	CGA4J3X7S2A474K125AE			
			±20%	CGA4J3X7S2A474M125AE			
1μF	2012	1.25+0.25,-0.20	±10%	CGA4J3X7S2A105K125AE			
			±20%	CGA4J3X7S2A105M125AE			
2.2μF	1608	0.80+0.15,-0.10	±10%			CGA3E1X7S1C225K080AE	CGA3E3X7S1A225K080AE
			±20%			CGA3E1X7S1C225M080AE	CGA3E3X7S1A225M080AE
	3216	1.60+0.30,-0.20	±10%	CGA5L3X7S2A225K160AE			
			±20%	CGA5L3X7S2A225M160AE			
3.3μF	3225	2.00+0.30,-0.20	±10%	CGA6M3X7S2A335K200AE			
			±20%	CGA6M3X7S2A335M200AE			
4.7μF	3225	2.00+0.30,-0.20	±10%	CGA6M3X7S2A475K200AE			
			±20%	CGA6M3X7S2A475M200AE			
		2.30+0.30,-0.20	±10%		CGA6N3X7S1H475K230AE		
			±20%		CGA6N3X7S1H475M230AE		
	2012	1.25+0.25,-0.20	±10%			CGA4J1X7S1C106K125AE	CGA4J3X7S1A106K125AE
			±20%			CGA4J1X7S1C106M125AE	CGA4J3X7S1A106M125AE
10μF	3225	2.50±0.30	±10%		CGA6P3X7S1H106K250AE		
			±20%		CGA6P3X7S1H106M250AE		
	5750	2.30+0.30,-0.20	±10%	CGA9N3X7S2A106K230KE			
			±20%	CGA9N3X7S2A106M230KE			

⚠ 为了能够更加正确、安全地使用产品，请务必索取能进一步确认详细特性、规格的采购规格书。  
 记载内容可能因为产品改良等原因不经预告而更改，恕不另行通知。

## 电容范围表

温度特性: X7T (-55 to +125°C、+22, -33%)

电容	尺寸	厚度 (mm)	电容容差	目录型号		
				额定电压 Edc: 630V	额定电压 Edc: 450V	额定电压 Edc: 250V
10 nF	2012	0.85±0.15	± 10%	CGA4F4X7T2W103K085AE		
			± 20%	CGA4F4X7T2W103M085AE		
22 nF	2012	1.25+0.25,-0.20	± 10%	CGA4J4X7T2W223K125AE		
			± 20%	CGA4J4X7T2W223M125AE		
47 nF	2012	1.25+0.25,-0.20	± 10%	CGA4J4X7T2W473K125AE	CGA4J3X7T2E473K125AE	
			± 20%	CGA4J4X7T2W473M125AE	CGA4J3X7T2E473M125AE	
	3216	1.60+0.30,-0.20	± 10%	CGA5L1X7T2J473K160AE		
			± 20%	CGA5L1X7T2J473M160AE		
2012	1.25+0.25,-0.20	± 10%		CGA4J3X7T2E104K125AE		
		± 20%		CGA4J3X7T2E104M125AE		
100 nF	3216	1.60+0.30,-0.20	± 10%	CGA5L4X7T2W104K160AE		
			± 20%	CGA5L4X7T2W104M160AE		
	3225	1.60+0.30,-0.20	± 10%	CGA6L1X7T2J104K160AE		
			± 20%	CGA6L1X7T2J104M160AE		
150nF	3225	2.00+0.30,-0.20	±10%	CGA6M1X7T2J154K200AE		
			±20%	CGA6M1X7T2J154M200AE		
220 nF	3216	1.60+0.30,-0.20	± 10%		CGA5L3X7T2E224K160AE	
			± 20%		CGA5L3X7T2E224M160AE	
	3225	2.00+0.30,-0.20	± 10%	CGA6M4X7T2W224K200AE		
			± 20%	CGA6M4X7T2W224M200AE		
4532	2.00+0.30,-0.20	± 10%	CGA8M1X7T2J224K200KE			
		± 20%	CGA8M1X7T2J224M200KE			
330nF	3225	2.00+0.30,-0.20	±10%		CGA6M3X7T2E334K200AE	
			±20%		CGA6M3X7T2E334M200AE	
470 nF	4532	2.30+0.30,-0.20	± 10%	CGA8N4X7T2W474K230KE		
			± 20%	CGA8N4X7T2W474M230KE		
	5750	2.50±0.30	± 10%	CGA9P1X7T2J474K250KE		
			± 20%	CGA9P1X7T2J474M250KE		
1 μF	4532	2.50±0.30	± 10%		CGA8P3X7T2E105K250KE	
			± 20%		CGA8P3X7T2E105M250KE	
	5750	2.50±0.30	± 10%	CGA9P4X7T2W105K250KE		
			± 20%	CGA9P4X7T2W105M250KE		
2.2 uF	5750	2.50±0.30	± 10%		CGA9P3X7T2E225K250KE	
			± 20%		CGA9P3X7T2E225M250KE	

⚠ 为了能够更加正确、安全地使用产品，请务必索取能进一步确认详细特性、规格的采购规格书。  
 记载内容可能因为产品改良等原因不经预告而更改，恕不另行通知。



## MULTILAYER CERAMIC CHIP CAPACITORS



## 电容范围表

温度特性: X8R (-55 to +150°C、±15%)

电容	尺寸	厚度 (mm)	电容容差	目录型号			
				额定电压 Edc: 100V	额定电压 Edc: 50V	额定电压 Edc: 25V	额定电压 Edc: 16V
150pF	1005	0.50+0.10,-0.05	±10%	CGA2B2X8R2A151K050BE	CGA2B2X8R1H151K050BE		
			±20%	CGA2B2X8R2A151M050BE	CGA2B2X8R1H151M050BE		
220pF	1005	0.50+0.10,-0.05	±10%	CGA2B2X8R2A221K050BE	CGA2B2X8R1H221K050BE		
			±20%	CGA2B2X8R2A221M050BE	CGA2B2X8R1H221M050BE		
330pF	1005	0.50+0.10,-0.05	±10%	CGA2B2X8R2A331K050BE	CGA2B2X8R1H331K050BE		
			±20%	CGA2B2X8R2A331M050BE	CGA2B2X8R1H331M050BE		
470pF	1005	0.50+0.10,-0.05	±10%	CGA2B2X8R2A471K050BE	CGA2B2X8R1H471K050BE		
			±20%	CGA2B2X8R2A471M050BE	CGA2B2X8R1H471M050BE		
680pF	1005	0.50+0.10,-0.05	±10%	CGA2B2X8R2A681K050BE	CGA2B2X8R1H681K050BE		
			±20%	CGA2B2X8R2A681M050BE	CGA2B2X8R1H681M050BE		
1nF	1005	0.50+0.10,-0.05	±10%	CGA2B2X8R2A102K050BE	CGA2B2X8R1H102K050BE		
			±20%	CGA2B2X8R2A102M050BE	CGA2B2X8R1H102M050BE		
	1608	0.80+0.15,-0.10	±10%	CGA3E2X8R2A102K080AE	CGA3E2X8R1H102K080AE		
			±20%	CGA3E2X8R2A102M080AE	CGA3E2X8R1H102M080AE		
1.5nF	1005	0.50+0.10,-0.05	±10%	CGA2B2X8R2A152K050BE	CGA2B2X8R1H152K050BE		
			±20%	CGA2B2X8R2A152M050BE	CGA2B2X8R1H152M050BE		
	1608	0.80+0.15,-0.10	±10%	CGA3E2X8R2A152K080AE	CGA3E2X8R1H152K080AE		
			±20%	CGA3E2X8R2A152M080AE	CGA3E2X8R1H152M080AE		
2.2nF	1005	0.50+0.10,-0.05	±10%	CGA2B2X8R2A222K050BE	CGA2B2X8R1H222K050BE		
			±20%	CGA2B2X8R2A222M050BE	CGA2B2X8R1H222M050BE		
	1608	0.80+0.15,-0.10	±10%	CGA3E2X8R2A222K080AE	CGA3E2X8R1H222K080AE		
			±20%	CGA3E2X8R2A222M080AE	CGA3E2X8R1H222M080AE		
3.3nF	1005	0.50+0.10,-0.05	±10%	CGA2B3X8R2A332K050BE	CGA2B2X8R1H332K050BE		
			±20%	CGA2B3X8R2A332M050BE	CGA2B2X8R1H332M050BE		
	1608	0.80+0.15,-0.10	±10%	CGA3E2X8R2A332K080AE	CGA3E2X8R1H332K080AE		
			±20%	CGA3E2X8R2A332M080AE	CGA3E2X8R1H332M080AE		
4.7nF	1005	0.50+0.10,-0.05	±10%		CGA2B2X8R1H472K050BE		
			±20%		CGA2B2X8R1H472M050BE		
	1608	0.80+0.15,-0.10	±10%	CGA3E2X8R2A472K080AE	CGA3E2X8R1H472K080AE		
			±20%	CGA3E2X8R2A472M080AE	CGA3E2X8R1H472M080AE		
6.8nF	1005	0.50+0.10,-0.05	±10%		CGA2B3X8R1H682K050BE	CGA2B2X8R1E682K050BE	
			±20%		CGA2B3X8R1H682M050BE	CGA2B2X8R1E682M050BE	
	1608	0.80+0.15,-0.10	±10%	CGA3E2X8R2A682K080AE	CGA3E2X8R1H682K080AE		
			±20%	CGA3E2X8R2A682M080AE	CGA3E2X8R1H682M080AE		
10nF	1005	0.50+0.10,-0.05	±10%		CGA2B3X8R1H103K050BE	CGA2B2X8R1E103K050BE	
			±20%		CGA2B3X8R1H103M050BE	CGA2B2X8R1E103M050BE	
	1608	0.80+0.15,-0.10	±10%	CGA3E2X8R2A103K080AE	CGA3E2X8R1H103K080AE		
			±20%	CGA3E2X8R2A103M080AE	CGA3E2X8R1H103M080AE		
15nF	1005	0.50+0.10,-0.05	±10%			CGA2B3X8R1E153K050BE	
			±20%			CGA2B3X8R1E153M050BE	
	1608	0.80+0.15,-0.10	±10%	CGA3E2X8R2A153K080AE	CGA3E2X8R1H153K080AE		
			±20%	CGA3E2X8R2A153M080AE	CGA3E2X8R1H153M080AE		
22nF	1005	0.50+0.10,-0.05	±10%			CGA2B3X8R1E223K050BE	
			±20%			CGA2B3X8R1E223M050BE	
	1608	0.80+0.15,-0.10	±10%	CGA3E3X8R2A223K080AE	CGA3E2X8R1H223K080AE		
			±20%	CGA3E3X8R2A223M080AE	CGA3E2X8R1H223M080AE		
2012	1.25+0.25,-0.20	±10%	CGA4J2X8R2A223K125AE				
		±20%	CGA4J2X8R2A223M125AE				
33nF	1005	0.50+0.10,-0.05	±10%			CGA2B1X8R1E333K050BE	CGA2B3X8R1C333K050BE
			±20%			CGA2B1X8R1E333M050BE	CGA2B3X8R1C333M050BE
	1608	0.80+0.15,-0.10	±10%		CGA3E2X8R1H333K080AE		
			±20%		CGA3E2X8R1H333M080AE		
2012	1.25+0.25,-0.20	±10%	CGA4J3X8R2A333K125AE				
		±20%	CGA4J3X8R2A333M125AE				
47nF	1005	0.50+0.10,-0.05	±10%			CGA2B1X8R1E473K050BE	CGA2B3X8R1C473K050BE
			±20%			CGA2B1X8R1E473M050BE	CGA2B3X8R1C473M050BE
	1608	0.80+0.15,-0.10	±10%		CGA3E2X8R1H473K080AE		
			±20%		CGA3E2X8R1H473M080AE		
2012	1.25+0.25,-0.20	±10%	CGA4J3X8R2A473K125AE				
		±20%	CGA4J3X8R2A473M125AE				
68nF	1608	0.80+0.15,-0.10	±10%		CGA3E3X8R1H683K080AE	CGA3E2X8R1E683K080AE	
			±20%		CGA3E3X8R1H683M080AE	CGA3E2X8R1E683M080AE	
	2012	1.25+0.25,-0.20	±10%	CGA4J3X8R2A683K125AE	CGA4J2X8R1H683K125AE		
			±20%	CGA4J3X8R2A683M125AE	CGA4J2X8R1H683M125AE		

■ 灰色涂层的品名，为新规设计非推荐品。

⚠ 为了能够更加正确、安全地使用产品，请务必索取能进一步确认详细特性、规格的采购规格书。  
 记载内容可能因为产品改良等原因不经预告而更改，恕不另行通知。

## 电容范围表

温度特性: X8R (-55 to +150°C、±15%)

电容	尺寸	厚度 (mm)	电容容差	目录型号			
				额定电压 Edc: 100V	额定电压 Edc: 50V	额定电压 Edc: 25V	额定电压 Edc: 16V
100nF	1608	0.80+0.15,-0.10	±10%		CGA3E3X8R1H104K080AE	CGA3E2X8R1E104K080AE	
			±20%		CGA3E3X8R1H104M080AE	CGA3E2X8R1E104M080AE	
	2012	1.25+0.25,-0.20	±10%		CGA4J2X8R1H104K125AE		
			±20%		CGA4J2X8R1H104M125AE		
3216	1.15±0.15	±10%	CGA5H2X8R2A104K115AE				
			±20%	CGA5H2X8R2A104M115AE			
150nF	1608	0.80+0.15,-0.10	±10%			CGA3E3X8R1E154K080AE	
			±20%			CGA3E3X8R1E154M080AE	
	2012	0.85±0.15	±10%			CGA4F2X8R1E154K085AE	
			±20%			CGA4F2X8R1E154M085AE	
		1.25+0.25,-0.20	±10%		CGA4J3X8R1H154K125AE		
			±20%		CGA4J3X8R1H154M125AE		
3216	1.60+0.30,-0.20	±10%	CGA5L2X8R2A154K160AE				
		±20%	CGA5L2X8R2A154M160AE				
220nF	1608	0.80+0.15,-0.10	±10%			CGA3E3X8R1E224K080AE	
			±20%			CGA3E3X8R1E224M080AE	
	2012	1.25+0.25,-0.20	±10%		CGA4J3X8R1H224K125AE	CGA4J2X8R1E224K125AE	
			±20%		CGA4J3X8R1H224M125AE	CGA4J2X8R1E224M125AE	
3216	1.60+0.30,-0.20	±10%	CGA5L3X8R2A224K160AE				
		±20%	CGA5L3X8R2A224M160AE				
330nF	1608	0.80+0.15,-0.10	±10%			CGA3E1X8R1E334K080AE	CGA3E3X8R1C334K080AE
			±20%			CGA3E1X8R1E334M080AE	CGA3E3X8R1C334M080AE
	2012	1.25+0.25,-0.20	±10%			CGA4J2X8R1E334K125AE	
			±20%			CGA4J2X8R1E334M125AE	
3216	1.60+0.30,-0.20	±10%	CGA5L3X8R2A334K160AE	CGA5L2X8R1H334K160AE			
		±20%	CGA5L3X8R2A334M160AE	CGA5L2X8R1H334M160AE			
470nF	1608	0.80+0.15,-0.10	±10%				CGA3E3X8R1C474K080AE
			±20%				CGA3E3X8R1C474M080AE
	2012	1.25+0.25,-0.20	±10%			CGA4J3X8R1E474K125AE	
			±20%			CGA4J3X8R1E474M125AE	
3216	1.60+0.30,-0.20	±10%		CGA5L2X8R1H474K160AE			
		±20%		CGA5L2X8R1H474M160AE			
3225	2.00+0.30,-0.20	±10%	CGA6M3X8R2A474K200AE				
		±20%	CGA6M3X8R2A474M200AE				
680nF	2012	1.25+0.25,-0.20	±10%			CGA4J1X8R1E684K125AE	CGA4J3X8R1C684K125AE
			±20%			CGA4J1X8R1E684M125AE	CGA4J3X8R1C684M125AE
	3216	1.60+0.30,-0.20	±10%		CGA5L3X8R1H684K160AE		
			±20%		CGA5L3X8R1H684M160AE		
3225	2.50±0.30	±10%	CGA6P3X8R2A684K250AE				
		±20%	CGA6P3X8R2A684M250AE				
1μF	2012	1.25+0.25,-0.20	±10%			CGA4J1X8R1E105K125AE	CGA4J3X8R1C105K125AE
			±20%			CGA4J1X8R1E105M125AE	CGA4J3X8R1C105M125AE
	3216	1.60+0.30,-0.20	±10%		CGA5L3X8R1H105K160AE	CGA5L2X8R1E105K160AE	
±20%				CGA5L3X8R1H105M160AE	CGA5L2X8R1E105M160AE		
1.5μF	3216	1.60+0.30,-0.20	±10%		CGA5L3X8R1E155K160AE		
			±20%		CGA5L3X8R1E155M160AE		
2.2μF	3216	1.60+0.30,-0.20	±10%		CGA5L3X8R1E225K160AE		
			±20%		CGA5L3X8R1E225M160AE		
3.3μF	3216	1.60+0.30,-0.20	±10%		CGA5L1X8R1E335K160AE	CGA5L3X8R1C335K160AE	
			±20%		CGA5L1X8R1E335M160AE	CGA5L3X8R1C335M160AE	
	3225	2.50±0.30	±10%		CGA6P2X8R1E335K250AE		
		±20%		CGA6P2X8R1E335M250AE			
4.7μF	3216	1.60+0.30,-0.20	±10%		CGA5L1X8R1E475K160AE	CGA5L3X8R1C475K160AE	
			±20%		CGA5L1X8R1E475M160AE	CGA5L3X8R1C475M160AE	
	3225	2.50±0.30	±10%		CGA6P3X8R1E475K250AE		
±20%				CGA6P3X8R1E475M250AE			
10μF	3225	2.50±0.30	±10%		CGA6P1X8R1E106K250AE	CGA6P3X8R1C106K250AE	
			±20%		CGA6P1X8R1E106M250AE	CGA6P3X8R1C106M250AE	

⚠ 为了能够更加正确、安全地使用产品，请务必索取能进一步确认详细特性、规格的采购规格书。  
 记载内容可能因为产品改良等原因不经预告而更改，恕不另行通知。

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Multilayer Ceramic Capacitors MLCC - SMD/SMT category:](#)*

*Click to view products by [TDK manufacturer:](#)*

Other Similar products are found below :

[M39014/02-1225V](#) [M39014/22-0631](#) [D55342E07B523DR-T/R](#) [NCA1206X7R103K50TRPF](#) [NCA1206X7R104K16TRPF](#) [NIN-FB391JTRF](#)  
[NIN-FC2R7JTRF](#) [NMC0201X5R474K4TRPF](#) [NMC0402NPO220J50TRPF](#) [NMC0402X5R105K6.3TRPF](#) [NMC0402X5R224K6.3TRPF](#)  
[NMC0402X7R103J25TRPF](#) [NMC0402X7R153K16TRPF](#) [NMC0603NPO1R8C50TRPF](#) [NMC0603NPO201J50TRPF](#)  
[NMC0603NPO330G50TRPF](#) [NMC0603X5R475M6.3TRPF](#) [NMC0805NPO270J50TRPF](#) [NMC0805NPO820J50TRPF](#)  
[NMC0805X7R224K16TRPLPF](#) [NMC0805X7R224K25TRPF](#) [NMC1206X7R102K50TRPF](#) [NMC1206X7R106K10TRPLPF](#)  
[NMC1206X7R475K10TRPLPF](#) [NMC-H0805X7R472K250TRPF](#) [NMC-L0402NPO7R0C50TRPF](#) [NMC-L0603NPO2R2B50TRPF](#) [NMC-](#)  
[P0805NPO221J500TRPLPF](#) [NMC-Q0402NPO8R2D200TRPF](#) [C1206C101J1GAC](#) [C1608C0G2A221J](#) [C1608X7R1E334K](#) [C2012C0G2A472J](#)  
[2220J2K00562KXT](#) [1812J2K00332KXT](#) [CDR31BX103AKWR](#) [CDR33BX104AKUR](#) [CDR33BX683AKUS](#) [CGA2B2C0G1H010C](#)  
[CGA2B2C0G1H040C](#) [CGA2B2C0G1H050C](#) [CGA2B2C0G1H060D](#) [CGA2B2C0G1H070D](#) [CGA2B2C0G1H120J](#) [CGA2B2C0G1H151J](#)  
[CGA2B2C0G1H181JT0Y0F](#) [CGA2B2C0G1H1R5C](#) [CGA2B2C0G1H2R2C](#) [CGA2B2C0G1H390J](#) [CGA2B2C0G1H391J](#)