

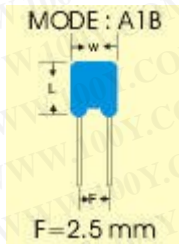


TROUBLE  
Service • Quality • Price

# MULTILAYER CERAMIC CAPACITORS

積層電容器

勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-54151736  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)



SIZE CODE AND DIMENSIONS: Units in inches (millimeter)

SIZE CODE	L	W	T	LEAD DIAMETER(d)	LEAD LENGTH(L)	LEAD SPACING(F)	LEAD STYLES
R15	.150 (3.81)	.150 (3.81)	.100 (2.54)	0.024 (0.60)	.10(2.50) □ 1.0(25.0)	.100(2.54)	A1
						.200(5.08)	A2
						.300(7.62)	A2
R20	.200 (5.08)	.200 (5.08)	.125 (3.18)	0.024 (0.60)	.10(2.50) □ 1.0(25.0)	.100(2.50)	A1
						.200(5.08)	A2
						.250(6.35)	A2
R30	.300 (7.62)	.300 (7.62)	.150 (2.18)	0.024 (0.60)	.10(2.50) □ 1.0(25.0)	.200(5.08)	A2
						.300(7.62)	A2

## ELECTRICAL SPECIFICATIONS

Capacitance Range: 1pF to 10µF  
 Capacitance Tolerance: (Standard)  
 NPO: F=± 1%  
 G=± 2%  
 C=± 0.25pF (10pF and below)  
 D=± 0.5pF (10pF and below)  
 J=± 5% (10pF and above)  
 K=± 10% (5.6pF and above)  
 M=± 20% (2.7pF and above)  
 X7R: K=± 10%  
 M=± 20%  
 Z=+80~-20%  
 Working Voltage: 25, 50, 100, 200, 1K VDC  
 Temperature Characteristic:  
 NPO: 0 ± 30ppm°C, -55°C to +125°C  
 X7R: ± 15% C, -55°C to +125°C  
 Z5U: +22% to -56°C, +10°C to 85°C  
 Y5V: +22% to -82°C, -30°C to 85°C  
 Insulation Resistance: at 25°C  
 NPO,X7R: 100K Megohms or 1000 Megohms-  
 Microfarads whichever is less at  
 rated voltage within 2 minutes of  
 charging.  
 Z5U, Y5V: 10K Megohms or 1000 Megohms-  
 Microfarads whichever is less at  
 rated voltage within 2 minutes of charging.  
**MECHANICAL SPECIFICATIONS**  
 Cast: Conformal coated (epoxy)  
 Lead Material: Solder coated, copper  
 Package Method: Bulk, Tape & Ammo pack,  
 Solder ability: (MIL-STD-202 Method 208)  
 Leach Resistance: Temp 230°C, 20 seconds  
 Immersion in Sn62

**\*STANDARD TOLERANCE**  
 NPO: J. K.  
 X7R: K. M.  
 Z5U, Y5V: M. Z.  
 Capacitance Test at 25°C or referred to +25°C:  
 NPO, X7R:  
 1.0 V RMS ±0.25 VRMS and 1KHz;  
 1MHz for values below 100pF,  
 Z5U, Y5V: 0.5 ± 0.1VRMS maximum and 1KHz  
 Dissipation Factor:  
 NPO: 0.1% maximum at 25°C, 1.0VRMS  
 ± 0.25VRMS and 1KHz, 1MHz for  
 values below 100pF  
 X7R: 2.5% maximum at 25°C, 1.0 VRMS  
 ± 0.25VRMS and 1KHz.  
 Z5U, Y5V: 4% maximum at 25°C, 0.5 ± 0.1VRMS  
 Maximum and 1KHz.  
 Dielectric Strength:  
 NPO, X7R: 250% rated voltage with 50 mA  
 maximum charging current.  
 Z5U, Y5V: 200% rated voltage with 50mA  
 maximum charging current.  
 Life Test: (1000 hrs)  
 NPO, X7R: 200% rated voltage at +125°C  
 Z5U, Y5V: 150% rated voltage at +85°C  
 Humidity Resistance:  
 (MIL-SSTD-202 Method 106)  
 NPO, X7R, Z5U: 96 hrs 40°C relative  
 Humidity 90-95%  
 Thermal Shock:  
 (MIL-STD-202 Method 107, condition A)  
 Taping  
 (CC) Taping

## OF MONO RADIAL

T.C. SIZE		NPO						X7R						Z5U, Y5V					
WVDC CAP		R15		R20		R30		R15		R20		R30		R15		R20		R30	
		50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
1R0 to 100	1R0 to 101	█	█																
120 to 180	121 to 181	█		█	█														
220 to 330	221 to 331	█						█	█	█	█								
390 to 560	391 to 561	█																	
680 to 1000	681 to 102												█	█					
1200 to 1800	122 to 182		█			█	█												
2200 to 3300	222 to 332																		
3900 to 5600	392 to 562																		
6800 to 8200	682 to 822																█	█	
0.01 $\mu$ F	103																		
0.012 to 0.018	123 to 183																		
0.22 to 0.033	223 to 333																		
0.039 to 0.056	393 to 563																		
0.068 to 0.082	683 to 823																		
0.10 $\mu$ F	104																		
0.12 to 0.18	124 to 184																		
0.22 to 0.47	224 to 474																		
0.56 to 0.82	564 to 824																		
1.00 to 2.20	105 to 225																		

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