

# M15 to M50 Series Multilayer Ceramic Capacitors



- Radial Leaded  
Conformally Coated
- Encapsulation consists of a moisture and shock resistant coating that meets UL94V-0
- Over 300 CV values available
- Applications :  
Filtering, Bypass, Coupling
- IECQ Approved to:  
QC300601/US0002 - NPO  
QC300701/US0002 - X7R  
QC300701/US0004 - Z5U
- Available in 1-1/4" Lead length  
As a Non Standard Item

## GENERAL SPECIFICATIONS

Voltage Range:  
50, 100, 200 VDC

Capacitance Range:  
1 pF to 6.8  $\mu$ F

Temperature Coefficients:  
COG(NPO), X7R, Z5U

Available in Tape and Reel configuration:  
Add 'TR' to end of catalog number.

## COG (NPO) Temperature Coefficient 200 VOLTS

Capacity	Size (Inches)				Catalog Number
	L	H	T	S	
1.0 pF	.150	.210	.100	.100	M15G109D2
1.0 pF	.200	.260	.125	.100	M20G109D2
1.0 pF	.200	.260	.125	.200	M22G109D2
1.5 pF	.150	.210	.100	.100	M15G159D2
1.5 pF	.200	.260	.125	.100	M20G159D2
1.5 pF	.200	.260	.125	.200	M22G159D2
2.2 pF	.150	.210	.100	.100	M15G229D2
2.2 pF	.200	.260	.125	.100	M20G229D2
2.2 pF	.200	.260	.125	.200	M22G229D2
2.7 pF	.150	.210	.100	.100	M15G279D2
2.7 pF	.200	.260	.125	.100	M20G279D2
2.7 pF	.200	.260	.125	.200	M22G279D2
3.3 pF	.150	.210	.100	.100	M15G339D2
3.3 pF	.200	.260	.125	.100	M20G339D2
3.3 pF	.200	.260	.125	.200	M22G339D2
3.9 pF	.150	.210	.100	.100	M15G399D2
3.9 pF	.200	.260	.125	.100	M20G399D2
3.9 pF	.200	.260	.125	.200	M22G399D2
4.7 pF	.150	.210	.100	.100	M15G479D2
4.7 pF	.200	.260	.125	.100	M20G479D2
4.7 pF	.200	.260	.125	.200	M22G479D2
5.6 pF	.150	.210	.100	.100	M15G569D2
5.6 pF	.200	.260	.125	.100	M20G569D2
5.6 pF	.200	.260	.125	.200	M22G569D2
6.8 pF	.150	.210	.100	.100	M15G689D2
6.8 pF	.200	.260	.125	.100	M20G689D2
6.8 pF	.200	.260	.125	.200	M22G689D2
8.2 pF	.150	.210	.100	.100	M15G829D2
8.2 pF	.200	.260	.125	.100	M20G829D2
8.2 pF	.200	.260	.125	.200	M22G829D2
10 pF	.150	.210	.100	.100	M15G100*2
10 pF	.200	.260	.125	.100	M20G100*2
10 pF	.200	.260	.125	.200	M22G100*2
12 pF	.150	.210	.100	.100	M15G120*2
12 pF	.200	.260	.125	.100	M20G120*2
12 pF	.200	.260	.125	.200	M22G120*2
15 pF	.150	.210	.100	.100	M15G150*2
15 pF	.200	.260	.125	.100	M20G150*2
15 pF	.200	.260	.125	.200	M22G150*2
18 pF	.150	.210	.100	.100	M15G180*2
18 pF	.200	.260	.125	.100	M20G180*2
18 pF	.200	.260	.125	.200	M22G180*2
22 pF	.150	.210	.100	.100	M15G220*2
22 pF	.200	.260	.125	.100	M20G220*2
22 pF	.200	.260	.125	.200	M22G220*2

Capacity	Size (Inches)				Catalog Number
	L	H	T	S	
27 pF	.150	.210	.100	.100	M15G270*2
27 pF	.200	.260	.125	.100	M20G270*2
27 pF	.200	.260	.125	.200	M22G270*2
33 pF	.150	.210	.100	.100	M15G330*2
33 pF	.200	.260	.125	.100	M20G330*2
33 pF	.200	.260	.125	.200	M22G330*2
39 pF	.150	.210	.100	.100	M15G390*2
39 pF	.200	.260	.125	.100	M20G390*2
39 pF	.200	.260	.125	.200	M22G390*2
47 pF	.150	.210	.100	.100	M15G470*2
47 pF	.200	.260	.125	.100	M20G470*2
47 pF	.200	.260	.125	.200	M22G470*2
56 pF	.150	.210	.100	.100	M15G560*2
56 pF	.200	.260	.125	.100	M20G560*2
56 pF	.200	.260	.125	.200	M22G560*2
68 pF	.150	.210	.100	.100	M15G680*2
68 pF	.200	.260	.125	.100	M20G680*2
68 pF	.200	.260	.125	.200	M22G680*2
82 pF	.150	.210	.100	.100	M15G820*2
82 pF	.200	.260	.125	.100	M20G820*2
82 pF	.200	.260	.125	.200	M22G820*2
100 pF	.150	.210	.100	.100	M15G101*2
100 pF	.200	.260	.125	.100	M20G101*2
100 pF	.200	.260	.125	.200	M22G101*2
120 pF	.150	.210	.100	.100	M15G121*2
120 pF	.200	.260	.125	.100	M20G121*2
120 pF	.200	.260	.125	.200	M22G121*2
150 pF	.150	.210	.100	.100	M15G151*2
150 pF	.200	.260	.125	.100	M20G151*2
150 pF	.200	.260	.125	.200	M22G151*2
180 pF	.150	.210	.100	.100	M15G181*2
180 pF	.200	.260	.125	.100	M20G181*2
180 pF	.200	.260	.125	.200	M22G181*2
220 pF	.150	.210	.100	.100	M15G221*2
220 pF	.200	.260	.125	.100	M20G221*2
220 pF	.200	.260	.125	.200	M22G221*2
270 pF	.150	.210	.100	.100	M15G271*2
270 pF	.200	.260	.125	.100	M20G271*2
270 pF	.200	.260	.125	.200	M22G271*2
330 pF	.150	.210	.100	.100	M15G331*2
330 pF	.200	.260	.125	.100	M20G331*2
330 pF	.200	.260	.125	.200	M22G331*2
390 pF	.150	.210	.100	.100	M15G391*2
390 pF	.200	.260	.125	.100	M20G391*2
390 pF	.200	.260	.125	.200	M22G391*2

Capacity	Size (Inches)				Catalog Number
	L	H	T	S	
470 pF	.150	.210	.100	.100	M15G471*2
470 pF	.200	.260	.125	.100	M20G471*2
470 pF	.200	.260	.125	.200	M22G471*2
560 pF	.200	.260	.125	.100	M20G561*2
560 pF	.200	.260	.125	.200	M22G561*2
680 pF	.200	.260	.125	.100	M20G681*2
680 pF	.200	.260	.125	.200	M22G681*2
820 pF	.200	.260	.125	.100	M20G821*2
820 pF	.200	.260	.125	.200	M22G821*2
1000 pF	.200	.260	.125	.100	M20G102*2
1000 pF	.200	.260	.125	.200	M22G102*2
1200 pF	.200	.260	.125	.100	M20G122*2
1200 pF	.200	.260	.125	.200	M22G122*2
1500 pF	.200	.260	.125	.100	M20G152*2
1500 pF	.200	.260	.125	.200	M22G152*2
1800 pF	.200	.260	.125	.100	M20G182*2
1800 pF	.200	.260	.125	.200	M22G182*2
2200 pF	.200	.260	.125	.100	M20G222*2
2200 pF	.200	.260	.125	.200	M22G222*2
2700 pF	.200	.260	.125	.100	M20G272*2
2700 pF	.200	.260	.125	.200	M22G272*2
2700 pF	.300	.360	.150	.200	M30G272*2
3300 pF	.200	.260	.125	.100	M20G332*2
3300 pF	.200	.260	.125	.200	M22G332*2
3300 pF	.300	.360	.150	.200	M30G332*2
3900 pF	.300	.360	.150	.200	M30G392*2
4700 pF	.300	.360	.150	.200	M30G472*2
5600 pF	.300	.360	.150	.200	M30G562*2
6800 pF	.300	.360	.150	.200	M30G682*2
8200 pF	.300	.360	.150	.200	M30G822*2
.01 $\mu$ F	.300	.360	.150	.200	M30G103*2
.012 $\mu$ F	.300	.360	.150	.200	M30G123*2
.012 $\mu$ F	.400	.460	.150	.200	M40G123*2
.015 $\mu$ F	.300	.360	.150	.200	M30G153*2
.015 $\mu$ F	.400	.460	.150	.200	M40G153*2
.018 $\mu$ F	.300	.360	.150	.200	M30G183*2
.018 $\mu$ F	.400	.460	.150	.200	M40G183*2
.022 $\mu$ F	.400	.460	.150	.200	M40G223*2
.027 $\mu$ F	.400	.460	.150	.200	M40G273*2
.033 $\mu$ F	.400	.460	.150	.200	M40G333*2
.039 $\mu$ F	.400	.460	.150	.200	M40G393*2
.039 $\mu$ F	.500	.560	.200	.400	M50G393*2
.047 $\mu$ F	.400	.460	.150	.200	M40G473*2
.047 $\mu$ F	.500	.560	.200	.400	M50G473*2
.056 $\mu$ F	.500	.560	.200	.400	M50G563*2
.068 $\mu$ F	.500	.560	.200	.400	M50G683*2

Multilayer Ceramic Capacitors

Add 'TR' to end of part number for Tape & Reel  
M15, M20, M22 - 2,500 per reel  
M30 - 1,500 per reel  
M40 - 1,000 per reel  
M50 - N/A  
(Available in full reels only)

\* Insert proper letter symbol for tolerance:  
(1 pF to 8.2 pF available in D =  $\pm 5$  pF only)  
10 pF to 22 pF: J =  $\pm 5\%$ , K =  $\pm 10\%$   
27 pF to 47 pF: G =  $\pm 2\%$ , J =  $\pm 5\%$ , K =  $\pm 10\%$   
56 pF & Up: F =  $\pm 1\%$ , G =  $\pm 2\%$ , J =  $\pm 5\%$ , K =  $\pm 10\%$

# M15 to M50 Series Multilayer Ceramic Capacitors



## COG (NPO) Temperature Coefficient 100 VDC

Capacity	Size (Inches)				Catalog Number
	L	H	T	S	
120 pF	.150	.210	.100	.100	M15G121*1
150 pF	.150	.210	.100	.100	M15G151*1
180 pF	.150	.210	.100	.100	M15G181*1
220 pF	.150	.210	.100	.100	M15G221*1
270 pF	.150	.210	.100	.100	M15G271*1
330 pF	.150	.210	.100	.100	M15G331*1
390 pF	.150	.210	.100	.100	M15G391*1
470 pF	.150	.210	.100	.100	M15G471*1
560 pF	.150	.210	.100	.100	M15G561*1
680 pF	.150	.210	.100	.100	M15G681*1
680 pF	.200	.260	.125	.100	M20G681*1
680 pF	.200	.260	.125	.200	M22G681*1
820 pF	.150	.210	.100	.100	M15G821*1
820 pF	.200	.260	.125	.100	M20G821*1
820 pF	.200	.260	.125	.200	M22G821*1
1000 pF	.150	.210	.100	.100	M15G102*1
1000 pF	.200	.260	.125	.100	M20G102*1
1000 pF	.200	.260	.125	.200	M22G102*1
1200 pF	.200	.260	.125	.100	M20G122*1
1200 pF	.200	.260	.125	.200	M22G122*1

Capacity	Size (Inches)				Catalog Number
	L	H	T	S	
1500 pF	.200	.260	.125	.100	M20G152*1
1500 pF	.200	.260	.125	.200	M22G152*1
1800 pF	.200	.260	.125	.100	M20G182*1
1800 pF	.200	.260	.125	.200	M22G182*1
2200 pF	.200	.260	.125	.100	M20G222*1
2200 pF	.200	.260	.125	.200	M22G222*1
2700 pF	.200	.260	.125	.100	M20G272*1
2700 pF	.200	.260	.125	.200	M22G272*1
3300 pF	.200	.260	.125	.100	M20G332*1
3300 pF	.200	.260	.125	.200	M22G332*1
3300 pF	.300	.360	.150	.200	M30G332*1
3900 pF	.200	.260	.125	.100	M20G392*1
3900 pF	.200	.260	.125	.200	M22G392*1
3900 pF	.300	.360	.150	.200	M30G392*1
4700 pF	.200	.260	.125	.100	M20G472*1
4700 pF	.200	.260	.125	.200	M22G472*1
4700 pF	.300	.360	.150	.200	M30G472*1
5600 pF	.200	.260	.125	.100	M20G562*1
5600 pF	.200	.260	.125	.200	M22G562*1
5600 pF	.300	.360	.150	.200	M30G562*1

Capacity	Size (Inches)				Catalog Number
	L	H	T	S	
6800 pF	.300	.360	.150	.200	M30G682*1
8200 pF	.300	.360	.150	.200	M30G822*1
.01 uF	.300	.360	.150	.200	M30G103*1
.012 uF	.300	.360	.150	.200	M30G123*1
.015 uF	.300	.360	.150	.200	M30G153*1
.018 uF	.300	.360	.150	.200	M30G183*1
.022 uF	.300	.360	.150	.200	M30G223*1
.027 uF	.300	.360	.150	.200	M30G273*1
.027 uF	.400	.460	.150	.200	M40G273*1
.033 uF	.400	.460	.150	.200	M40G333*1
.039 uF	.400	.460	.150	.200	M40G393*1
.039 uF	.500	.560	.200	.400	M50G393*1
.047 uF	.400	.460	.150	.200	M40G473*1
.047 uF	.500	.560	.200	.400	M50G473*1
.056 uF	.400	.460	.150	.200	M40G563*1
.056 uF	.500	.560	.200	.400	M50G563*1
.068 uF	.400	.460	.150	.200	M40G683*1
.068 uF	.500	.560	.200	.400	M50G683*1
.082 uF	.500	.560	.200	.400	M50G823*1
.1 uF	.500	.560	.200	.400	M50G104*1
.12 uF	.500	.560	.200	.400	M50G124*1

\* Insert proper letter symbol for tolerance:  
F = ±1%, G = ±2%, J = ±5%, K = ±10%

## X7R Temperature Coefficient 200 VDC

Capacity	Size (Inches)				Catalog Number
	L	H	T	S	
100 pF	.150	.210	.100	.100	M15R101*2
120 pF	.150	.210	.100	.100	M15R121*2
150 pF	.150	.210	.100	.100	M15R151*2
180 pF	.150	.210	.100	.100	M15R181*2
220 pF	.150	.210	.100	.100	M15R221*2
270 pF	.150	.210	.100	.100	M15R271*2
330 pF	.150	.210	.100	.100	M15R331*2
390 pF	.150	.210	.100	.100	M15R391*2
470 pF	.150	.210	.100	.100	M15R471*2
560 pF	.150	.210	.100	.100	M15R561*2
680 pF	.150	.210	.100	.100	M15R681*2
820 pF	.150	.210	.100	.100	M15R821*2
1000 pF	.150	.210	.100	.100	M15R102*2
1000 pF	.200	.260	.125	.100	M20R102*2
1000 pF	.200	.260	.125	.200	M22R102*2
1200 pF	.150	.210	.100	.100	M15R122*2
1200 pF	.200	.260	.125	.100	M20R122*2
1200 pF	.200	.260	.125	.200	M22R122*2
1500 pF	.150	.210	.100	.100	M15R152*2
1500 pF	.200	.260	.125	.100	M20R152*2
1500 pF	.200	.260	.125	.200	M22R152*2
1800 pF	.150	.210	.100	.100	M15R182*2
1800 pF	.200	.260	.125	.100	M20R182*2
1800 pF	.200	.260	.125	.200	M22R182*2

Capacity	Size (Inches)				Catalog Number
	L	H	T	S	
2200 pF	.150	.210	.100	.100	M15R222*2
2200 pF	.200	.260	.125	.100	M20R222*2
2200 pF	.200	.260	.125	.200	M22R222*2
2700 pF	.200	.260	.125	.100	M20R272*2
2700 pF	.200	.260	.125	.200	M22R272*2
3300 pF	.200	.260	.125	.100	M20R332*2
3300 pF	.200	.260	.125	.200	M22R332*2
3900 pF	.200	.260	.125	.100	M20R392*2
3900 pF	.200	.260	.125	.200	M22R392*2
4700 pF	.200	.260	.125	.100	M20R472*2
4700 pF	.200	.260	.125	.200	M22R472*2
5600 pF	.200	.260	.125	.100	M20R562*2
5600 pF	.200	.260	.125	.200	M22R562*2
6800 pF	.200	.260	.125	.100	M20R682*2
6800 pF	.200	.260	.125	.200	M22R682*2
8200 pF	.200	.260	.125	.100	M20R822*2
8200 pF	.200	.260	.125	.200	M22R822*2
.01 uF	.200	.260	.125	.100	M20R103*2
.01 uF	.200	.260	.125	.200	M22R103*2
.012 uF	.200	.260	.125	.100	M20R123*2
.012 uF	.200	.260	.125	.200	M22R123*2
.015 uF	.200	.260	.125	.100	M20R153*2
.015 uF	.200	.260	.125	.200	M22R153*2
.015 uF	.300	.360	.150	.200	M30R153*2

Capacity	Size (Inches)				Catalog Number
	L	H	T	S	
.018 uF	.200	.260	.125	.100	M20R183*2
.018 uF	.200	.260	.125	.200	M22R183*2
.018 uF	.300	.360	.150	.200	M30R183*2
.022 uF	.200	.260	.125	.100	M20R223*2
.022 uF	.200	.260	.125	.200	M22R223*2
.022 uF	.300	.360	.150	.200	M30R223*2
.027 uF	.300	.360	.150	.200	M30R273*2
.033 uF	.300	.360	.150	.200	M30R333*2
.039 uF	.300	.360	.150	.200	M30R393*2
.047 uF	.300	.360	.150	.200	M30R473*2
.056 uF	.300	.360	.150	.200	M30R563*2
.068 uF	.300	.360	.150	.200	M30R683*2
.082 uF	.300	.360	.150	.200	M30R823*2
.082 uF	.400	.460	.150	.200	M40R823*2
.1 uF	.300	.360	.150	.200	M30R104*2
.1 uF	.400	.460	.150	.200	M40R104*2
.12 uF	.400	.460	.150	.200	M40R124*2
.15 uF	.400	.460	.150	.200	M40R154*2
.18 uF	.400	.460	.150	.200	M40R184*2
.22 uF	.400	.460	.150	.200	M40R224*2
.22 uF	.500	.560	.200	.400	M50R224*2
.27 uF	.400	.460	.150	.200	M40R274*2
.27 uF	.500	.560	.200	.400	M50R274*2
.33 uF	.500	.560	.200	.400	M50R334*2
.39 uF	.500	.560	.200	.400	M50R394*2
.47 uF	.500	.560	.200	.400	M50R474*2

\* Insert proper letter symbol for tolerance:  
K = ±10%, M = ±20%

Add 'TR' to end of part number for Tape & Reel  
M15, M20, M22 - 2,500 per reel  
M30 - 1,500 per reel  
M40 - 1,000 per reel  
M50 - N/A  
(Available in full reels only)

# M15 to M50 Series Multilayer Ceramic Capacitors



## X7R Temperature Coefficient 100 VDC

Capacity	Size (Inches)				Catalog Number	Capacity	Size (Inches)				Catalog Number	Capacity	Size (Inches)				Catalog Number
	L	H	T	S			L	H	T	S			L	H	T	S	
820 pF	.150	.210	.100	.100	M15R821*1	.012 uF	.200	.260	.125	.100	M20R123*1	.1 uF	.200	.260	.125	.100	M20R104*1
1000 pF	.150	.210	.100	.100	M15R102*1	.012 uF	.200	.260	.125	.200	M22R123*1	.1 uF	.200	.260	.125	.200	M22R104*1
1200 pF	.150	.210	.100	.100	M15R122*1	.015 uF	.200	.260	.125	.100	M20R153*1	.1 uF	.300	.360	.150	.200	M30R104*1
1500 pF	.150	.210	.100	.100	M15R152*1	.015 uF	.200	.260	.125	.200	M22R153*1	.12 uF	.300	.360	.150	.200	M30R124*1
1800 pF	.150	.210	.100	.100	M15R182*1	.018 uF	.200	.260	.125	.100	M20R183*1	.15 uF	.300	.360	.150	.200	M30R154*1
2200 pF	.150	.210	.100	.100	M15R222*1	.018 uF	.200	.260	.125	.200	M22R183*1	.18 uF	.300	.360	.150	.200	M30R184*1
2700 pF	.150	.210	.100	.100	M15R272*1	.022 uF	.200	.260	.125	.100	M20R223*1	.22 uF	.300	.360	.150	.200	M30R224*1
3300 pF	.150	.210	.100	.100	M15R332*1	.022 uF	.200	.260	.125	.200	M22R223*1	.27 uF	.300	.360	.150	.200	M30R274*1
3900 pF	.150	.210	.100	.100	M15R392*1	.027 uF	.200	.260	.125	.100	M20R273*1	.33 uF	.300	.360	.150	.200	M30R334*1
4700 pF	.150	.210	.100	.100	M15R472*1	.027 uF	.200	.260	.125	.200	M22R273*1	.33 uF	.400	.460	.150	.200	M40R334*1
4700 pF	.200	.260	.125	.100	M20R472*1	.033 uF	.200	.260	.125	.100	M20R333*1	.39 uF	.300	.360	.150	.200	M30R394*1
4700 pF	.200	.260	.125	.200	M22R472*1	.033 uF	.200	.260	.125	.200	M22R333*1	.39 uF	.400	.460	.150	.200	M40R394*1
5600 pF	.150	.210	.100	.100	M15R562*1	.039 uF	.200	.260	.125	.100	M20R393*1	.47 uF	.300	.360	.150	.200	M30R474*1
5600 pF	.200	.260	.125	.100	M20R562*1	.039 uF	.200	.260	.125	.200	M22R393*1	.47 uF	.400	.460	.150	.200	M40R474*1
5600 pF	.200	.260	.125	.200	M22R562*1	.047 uF	.200	.260	.125	.100	M20R473*1	.56 uF	.400	.460	.150	.200	M40R564*1
6800 pF	.150	.210	.100	.100	M15R682*1	.047 uF	.200	.260	.125	.200	M22R473*1	.68 uF	.400	.460	.150	.200	M40R684*1
6800 pF	.200	.260	.125	.100	M20R682*1	.056 uF	.200	.260	.125	.100	M20R563*1	.68 uF	.500	.560	.200	.400	M50R684*1
6800 pF	.200	.260	.125	.200	M22R682*1	.056 uF	.200	.260	.125	.200	M22R563*1	.82 uF	.400	.460	.150	.200	M40R824*1
8200 pF	.150	.210	.100	.100	M15R822*1	.068 uF	.200	.260	.125	.100	M20R683*1	.82 uF	.500	.560	.200	.400	M50R824*1
8200 pF	.200	.260	.125	.100	M20R822*1	.068 uF	.200	.260	.125	.200	M22R683*1	1.0 uF	.400	.460	.150	.200	M40R105*1
8200 pF	.200	.260	.125	.200	M22R822*1	.068 uF	.300	.360	.150	.200	M30R683*1	1.0 uF	.500	.560	.200	.400	M50R105*1
.01 uF	.150	.210	.100	.100	M15R103*1	.082 uF	.200	.260	.125	.100	M20R823*1	1.2 uF	.500	.560	.200	.400	M50R125*1
.01 uF	.200	.260	.125	.100	M20R103*1	.082 uF	.200	.260	.125	.200	M22R823*1						
.01 uF	.200	.260	.125	.200	M22R103*1	.082 uF	.300	.360	.150	.200	M30R823*1						

\* Insert proper letter symbol for tolerance:  
K = ±10%, M = ±20%

## X7R Temperature Coefficient 50 VDC

Capacity	Size (Inches)				Catalog Number	Capacity	Size (Inches)				Catalog Number	Capacity	Size (Inches)				Catalog Number
	L	H	T	S			L	H	T	S			L	H	T	S	
3300 pF	.150	.210	.100	.100	M15R332*5	.033 uF	.150	.210	.100	.100	M15R333*5	.22 uF	.200	.260	.125	.100	M20R224*5
3900 pF	.150	.210	.100	.100	M15R392*5	.033 uF	.200	.260	.125	.100	M20R333*5	.22 uF	.200	.260	.125	.200	M22R224*5
4700 pF	.150	.210	.100	.100	M15R472*5	.033 uF	.200	.260	.125	.200	M22R333*5	.22 uF	.300	.360	.150	.200	M30R224*5
5600 pF	.150	.210	.100	.100	M15R562*5	.039 uF	.200	.260	.125	.100	M20R393*5	.27 uF	.200	.260	.125	.100	M20R274*5
6800 pF	.150	.210	.100	.100	M15R682*5	.039 uF	.200	.260	.125	.200	M22R393*5	.27 uF	.200	.260	.125	.200	M22R274*5
8200 pF	.150	.210	.100	.100	M15R822*5	.047 uF	.200	.260	.125	.100	M20R473*5	.27 uF	.300	.360	.150	.200	M30R274*5
.01 uF	.150	.210	.100	.100	M15R103*5	.047 uF	.200	.260	.125	.200	M22R473*5	.33 uF	.300	.360	.150	.200	M30R334*5
.012 uF	.150	.210	.100	.100	M15R123*5	.056 uF	.200	.260	.125	.100	M20R563*5	.39 uF	.300	.360	.150	.200	M30R394*5
.012 uF	.200	.260	.125	.100	M20R123*5	.056 uF	.200	.260	.125	.200	M22R563*5	.47 uF	.300	.360	.150	.200	M30R474*5
.012 uF	.200	.260	.125	.200	M22R123*5	.068 uF	.200	.260	.125	.100	M20R683*5	.56 uF	.300	.360	.150	.200	M30R564*5
.015 uF	.150	.210	.100	.100	M15R153*5	.068 uF	.200	.260	.125	.200	M22R683*5	.68 uF	.300	.360	.150	.200	M30R684*5
.015 uF	.200	.260	.125	.100	M20R153*5	.082 uF	.200	.260	.125	.100	M20R823*5	.82 uF	.300	.360	.150	.200	M30R824*5
.015 uF	.200	.260	.125	.200	M22R153*5	.082 uF	.200	.260	.125	.200	M22R823*5	1.0 uF	.300	.360	.150	.200	M30R105*5
.018 uF	.150	.210	.100	.100	M15R183*5	.1 uF	.200	.260	.125	.100	M20R104*5	1.0 uF	.400	.460	.150	.200	M40R105*5
.018 uF	.200	.260	.125	.100	M20R183*5	.1 uF	.200	.260	.125	.200	M22R104*5	1.2 uF	.400	.460	.150	.200	M40R125*5
.018 uF	.200	.260	.125	.200	M22R183*5	.12 uF	.200	.260	.125	.100	M20R124*5	1.5 uF	.400	.460	.150	.200	M40R155*5
.022 uF	.150	.210	.100	.100	M15R223*5	.12 uF	.200	.260	.125	.200	M22R124*5	1.8 uF	.400	.460	.150	.200	M40R185*5
.022 uF	.200	.260	.125	.100	M20R223*5	.15 uF	.200	.260	.125	.100	M20R154*5	2.2 uF	.400	.460	.150	.200	M40R225*5
.022 uF	.200	.260	.125	.200	M22R223*5	.15 uF	.200	.260	.125	.200	M22R154*5	2.2 uF	.500	.560	.200	.400	M50R225*5
.027 uF	.150	.210	.100	.100	M15R273*5	.15 uF	.300	.360	.150	.200	M30R154*5	2.7 uF	.500	.560	.200	.400	M50R275*5
.027 uF	.200	.260	.125	.100	M20R273*5	.18 uF	.200	.260	.125	.100	M20R184*5	3.3 uF	.500	.560	.200	.400	M50R335*5
.027 uF	.200	.260	.125	.200	M22R273*5	.18 uF	.200	.260	.125	.200	M22R184*5	3.9 uF	.500	.560	.200	.400	M50R395*5
						.18 uF	.300	.360	.150	.200	M30R184*5						

\* Insert proper letter symbol for tolerance:  
K = ±10%, M = ±20%

Add 'TR' to end of part number for Tape & Reel  
M15, M20, M22 - 2,500 per reel  
M30 - 1,500 per reel  
M40 - 1,000 per reel  
M50 - N/A  
(Available in full reels only)

Multilayer Ceramic Capacitors

# M15 to M50 Series Multilayer Ceramic Capacitors



## Z5U Temperature Coefficient 100 VDC

Capacity	Size (Inches)				Catalog Number
	L	H	T	S	
1000 pF	.150	.210	.100	.100	M15U102*1
1200 pF	.150	.210	.100	.100	M15U122*1
1500 pF	.150	.210	.100	.100	M15U152*1
1800 pF	.150	.210	.100	.100	M15U182*1
2200 pF	.150	.210	.100	.100	M15U222*1
2700 pF	.150	.210	.100	.100	M15U272*1
3300 pF	.150	.210	.100	.100	M15U332*1
3900 pF	.150	.210	.100	.100	M15U392*1
4700 pF	.150	.210	.100	.100	M15U472*1
5600 pF	.150	.210	.100	.100	M15U562*1
6800 uF	.150	.210	.100	.100	M15U682*1
8200 pF	.150	.210	.100	.100	M15U822*1
.01 uF	.150	.210	.100	.100	M15U103*1
.01 uF	.200	.260	.125	.100	M20U103*1
.01 uF	.200	.260	.125	.200	M22U103*1
.012 uF	.150	.210	.100	.100	M15U123*1
.012 uF	.200	.260	.125	.100	M20U123*1
.012 uF	.200	.260	.125	.200	M22U123*1
.015 uF	.150	.210	.100	.100	M15U153*1
.015 uF	.200	.260	.125	.100	M20U153*1
.015 uF	.200	.260	.125	.200	M22U153*1
.018 uF	.150	.210	.100	.100	M15U183*1
.018 uF	.200	.260	.125	.100	M20U183*1
.018 uF	.200	.260	.125	.200	M22U183*1

Capacity	Size (Inches)				Catalog Number
	L	H	T	S	
.022 uF	.200	.260	.125	.100	M20U223*1
.022 uF	.200	.260	.125	.200	M22U223*1
.027 uF	.200	.260	.125	.100	M20U273*1
.027 uF	.200	.260	.125	.200	M22U273*1
.033 uF	.200	.260	.125	.100	M20U333*1
.033 uF	.200	.260	.125	.200	M22U333*1
.039 uF	.200	.260	.125	.100	M20U393*1
.039 uF	.200	.260	.125	.200	M22U393*1
.047 uF	.200	.260	.125	.100	M20U473*1
.047 uF	.200	.260	.125	.200	M22U473*1
.056 uF	.200	.260	.125	.100	M20U563*1
.056 uF	.200	.260	.125	.200	M22U563*1
.068 uF	.200	.260	.125	.100	M20U683*1
.068 uF	.200	.260	.125	.200	M22U683*1
.082 uF	.200	.260	.125	.100	M20U823*1
.082 uF	.200	.260	.125	.200	M22U823*1
.1 uF	.200	.260	.125	.100	M20U104*1
.1 uF	.200	.260	.125	.200	M22U104*1
.1 uF	.300	.360	.150	.200	M30U104*1
.12 uF	.200	.260	.125	.100	M20U124*1
.12 uF	.200	.260	.125	.200	M22U124*1
.12 uF	.300	.360	.150	.200	M30U124*1
.15 uF	.200	.260	.125	.100	M20U154*1

Capacity	Size (Inches)				Catalog Number
	L	H	T	S	
.15 uF	.200	.260	.125	.200	M22U154*1
.15 uF	.300	.360	.150	.200	M30U154*1
.18 uF	.300	.360	.150	.200	M30U184*1
.22 uF	.300	.360	.150	.200	M30U224*1
.27 uF	.300	.360	.150	.200	M30U274*1
.33 uF	.300	.360	.150	.200	M30U334*1
.33 uF	.400	.460	.150	.200	M40U334*1
.39 uF	.300	.360	.150	.200	M30U394*1
.39 uF	.400	.460	.150	.200	M40U394*1
.47 uF	.300	.360	.150	.200	M30U474*1
.47 uF	.400	.460	.150	.200	M40U474*1
.56 uF	.400	.460	.150	.200	M40U564*1
.68 uF	.400	.460	.150	.200	M40U684*1
.82 uF	.400	.460	.150	.200	M40U824*1
1.0 uF	.400	.460	.150	.200	M40U105*1
1.0 uF	.500	.560	.200	.400	M50U105*1
1.2 uF	.400	.460	.150	.200	M40U125*1
1.2 uF	.500	.560	.200	.400	M50U125*1
1.5 uF	.400	.460	.150	.200	M40U155*1
1.5 uF	.500	.560	.200	.400	M50U155*1
1.8 uF	.500	.560	.200	.400	M50U185*1
2.2 uF	.500	.560	.200	.400	M50U225*1

\* Insert proper letter symbol for tolerance:  
M = ±20%, Z = + 80% - 20%, P = + 100% - 0%

## Z5U Temperature Coefficient 50 VDC

Capacity	Size (Inches)				Catalog Number
	L	H	T	S	
4700 pF	.150	.210	.100	.100	M15U472*5
5600 pF	.150	.210	.100	.100	M15U562*5
6800 pF	.150	.210	.100	.100	M15U682*5
8200 pF	.150	.210	.100	.100	M15U822*5
.01 uF	.150	.210	.100	.100	M15U103*5
.012 uF	.150	.210	.100	.100	M15U123*5
.015 uF	.150	.210	.100	.100	M15U153*5
.018 uF	.150	.210	.100	.100	M15U183*5
.022 uF	.150	.210	.100	.100	M15U223*5
.027 uF	.150	.210	.100	.100	M15U273*5
.027 uF	.200	.260	.125	.100	M20U273*5
.027 uF	.200	.260	.125	.200	M22U273*5
.033 uF	.150	.210	.100	.100	M15U333*5
.033 uF	.200	.260	.125	.100	M20U333*5
.033 uF	.200	.260	.125	.200	M22U333*5
.039 uF	.150	.210	.100	.100	M15U393*5
.039 uF	.200	.260	.125	.100	M20U393*5
.039 uF	.200	.260	.125	.200	M22U393*5
.047 uF	.150	.210	.100	.100	M15U473*5
.047 uF	.200	.260	.125	.100	M20U473*5
.047 uF	.200	.260	.125	.200	M22U473*5
.056 uF	.150	.210	.100	.100	M15U563*5
.056 uF	.200	.260	.125	.100	M20U563*5
.056 uF	.200	.260	.125	.200	M22U563*5

Capacity	Size (Inches)				Catalog Number
	L	H	T	S	
.068 uF	.150	.210	.100	.100	M15U683*5
.068 uF	.200	.260	.125	.100	M20U683*5
.068 uF	.200	.260	.125	.200	M22U683*5
.082 uF	.200	.260	.125	.100	M20U823*5
.082 uF	.200	.260	.125	.200	M22U823*5
.1 uF	.150	.210	.100	.100	M15U104*5
.1 uF	.200	.260	.125	.100	M20U104*5
.1 uF	.200	.260	.125	.200	M22U104*5
.12 uF	.200	.260	.125	.100	M20U124*5
.12 uF	.200	.260	.125	.200	M22U124*5
.15 uF	.200	.260	.125	.100	M20U154*5
.15 uF	.200	.260	.125	.200	M22U154*5
.18 uF	.200	.260	.125	.100	M20U184*5
.18 uF	.200	.260	.125	.200	M22U184*5
.22 uF	.200	.260	.125	.100	M20U224*5
.22 uF	.200	.260	.125	.200	M22U224*5
.27 uF	.200	.260	.125	.100	M20U274*5
.27 uF	.200	.260	.125	.200	M22U274*5
.27 uF	.300	.360	.150	.200	M30U274*5
.33 uF	.200	.260	.125	.100	M20U334*5
.33 uF	.200	.260	.125	.200	M22U334*5
.33 uF	.300	.360	.150	.200	M30U334*5
.39 uF	.200	.260	.125	.100	M20U394*5
.39 uF	.200	.260	.125	.200	M22U394*5
.39 uF	.300	.360	.150	.200	M30U394*5

Capacity	Size (Inches)				Catalog Number
	L	H	T	S	
.47 uF	.200	.260	.125	.100	M20U474*5
.47 uF	.200	.260	.125	.200	M22U474*5
.47 uF	.300	.360	.150	.200	M30U474*5
.56 uF	.200	.260	.125	.100	M20U564*5
.56 uF	.200	.260	.125	.200	M22U564*5
.56 uF	.300	.360	.150	.200	M30U564*5
.68 uF	.300	.360	.150	.200	M30U684*5
.82 uF	.300	.360	.150	.200	M30U824*5
1.0 uF	.300	.360	.150	.200	M30U105*5
1.2 uF	.300	.360	.150	.200	M30U125*5
1.2 uF	.400	.460	.150	.200	M40U125*5
1.5 uF	.300	.360	.150	.200	M30U155*5
1.5 uF	.400	.460	.150	.200	M40U155*5
1.8 uF	.300	.360	.150	.200	M30U185*5
1.8 uF	.400	.460	.150	.200	M40U185*5
2.2 uF	.400	.460	.150	.200	M40U225*5
2.7 uF	.400	.460	.150	.200	M40U275*5
3.3 uF	.400	.460	.150	.200	M40U335*5
3.9 uF	.400	.460	.150	.200	M40U395*5
3.9 uF	.500	.560	.200	.400	M50U395*5
4.7 uF	.400	.460	.150	.200	M40U475*5
4.7 uF	.500	.560	.200	.400	M50U475*5
5.6 uF	.500	.560	.200	.400	M50U565*5
6.8 uF	.500	.560	.200	.400	M50U685*5

\* Insert proper letter symbol for tolerance:  
M = ±20%, Z = + 80% - 20%, P = + 100% - 0%

Add 'TR' to end of part number for Tape & Reel  
M15, M20, M22 - 2,500 per reel  
M30 - 1,500 per reel  
M40 - 1,000 per reel  
M50 - N/A  
(Available in full reels only)