

# M15 to M50 Series Multilayer Ceramic Capacitors

**MALORY**


- 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

## 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      |
| 3300 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      |

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

**MALLORY**

Multilayer Ceramic Capacitors

## COG (NPO) Temperature Coefficient 100 VDC

| Capacity | Size<br>(Inches) |      |      |      | Catalog<br>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<br>(Inches) |      |      |      | Catalog<br>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<br>(Inches) |      |      |      | Catalog<br>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 =  $\pm 1\%$ , G =  $\pm 2\%$ , J =  $\pm 5\%$ , K =  $\pm 10\%$

## X7R Temperature Coefficient 200 VDC

| Capacity | Size<br>(Inches) |      |      |      | Catalog<br>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<br>(Inches) |      |      |      | Catalog<br>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<br>(Inches) |      |      |      | Catalog<br>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 =  $\pm 10\%$ , M =  $\pm 20\%$

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

**MALLORY**

Multilayer Ceramic Capacitors

## X7R Temperature Coefficient 100 VDC

| Capacity | Size (Inches) |      |      |      | Catalog Number |
|----------|---------------|------|------|------|----------------|
|          | L             | H    | T    | S    |                |
| 820 pF   | .150          | .210 | .100 | .100 | M15R821*1      |
| 1000 pF  | .150          | .210 | .100 | .100 | M15R102*1      |
| 1200 pF  | .150          | .210 | .100 | .100 | M15R122*1      |
| 1500 pF  | .150          | .210 | .100 | .100 | M15R152*1      |
| 1800 pF  | .150          | .210 | .100 | .100 | M15R182*1      |
| 2200 pF  | .150          | .210 | .100 | .100 | M15R222*1      |
| 2700 pF  | .150          | .210 | .100 | .100 | M15R272*1      |
| 3300 pF  | .150          | .210 | .100 | .100 | M15R332*1      |
| 3900 pF  | .150          | .210 | .100 | .100 | M15R392*1      |
| 4700 pF  | .150          | .210 | .100 | .100 | M15R472*1      |
| 4700 pF  | .200          | .260 | .125 | .100 | M20R472*1      |
| 4700 pF  | .200          | .260 | .125 | .200 | M22R472*1      |
| 5600 pF  | .150          | .210 | .100 | .100 | M15R562*1      |
| 5600 pF  | .200          | .260 | .125 | .100 | M20R562*1      |
| 5600 pF  | .200          | .260 | .125 | .200 | M22R562*1      |
| 6800 pF  | .150          | .210 | .100 | .100 | M15R682*1      |
| 6800 pF  | .200          | .260 | .125 | .100 | M20R682*1      |
| 6800 pF  | .200          | .260 | .125 | .200 | M22R682*1      |
| 8200 pF  | .150          | .210 | .100 | .100 | M15R822*1      |
| 8200 pF  | .200          | .260 | .125 | .100 | M20R822*1      |
| 8200 pF  | .200          | .260 | .125 | .200 | M22R822*1      |
| .01 uF   | .150          | .210 | .100 | .100 | M15R103*1      |
| .01 uF   | .200          | .260 | .125 | .100 | M20R103*1      |
| .01 uF   | .200          | .260 | .125 | .200 | M22R103*1      |

| Capacity | Size (Inches) |      |      |      | Catalog Number |
|----------|---------------|------|------|------|----------------|
|          | L             | H    | T    | S    |                |
| .012 uF  | .200          | .260 | .125 | .100 | M20R123*1      |
| .012 uF  | .200          | .260 | .125 | .200 | M22R123*1      |
| .015 uF  | .200          | .260 | .125 | .100 | M20R153*1      |
| .015 uF  | .200          | .260 | .125 | .200 | M22R153*1      |
| .018 uF  | .200          | .260 | .125 | .100 | M20R183*1      |
| .018 uF  | .200          | .260 | .125 | .200 | M22R183*1      |
| .022 uF  | .200          | .260 | .125 | .100 | M20R223*1      |
| .022 uF  | .200          | .260 | .125 | .200 | M22R223*1      |
| .027 uF  | .200          | .260 | .125 | .100 | M20R273*1      |
| .027 uF  | .200          | .260 | .125 | .200 | M22R273*1      |
| .033 uF  | .200          | .260 | .125 | .100 | M20R333*1      |
| .033 uF  | .200          | .260 | .125 | .200 | M22R333*1      |
| .039 uF  | .200          | .260 | .125 | .100 | M20R393*1      |
| .039 uF  | .200          | .260 | .125 | .200 | M22R393*1      |
| .047 uF  | .200          | .260 | .125 | .100 | M20R473*1      |
| .047 uF  | .200          | .260 | .125 | .200 | M22R473*1      |
| .056 uF  | .200          | .260 | .125 | .100 | M20R563*1      |
| .056 uF  | .200          | .260 | .125 | .200 | M22R563*1      |
| .068 uF  | .200          | .260 | .125 | .100 | M20R683*1      |
| .068 uF  | .200          | .260 | .125 | .200 | M22R683*1      |
| .068 uF  | .300          | .360 | .150 | .200 | M30R683*1      |
| .082 uF  | .200          | .260 | .125 | .100 | M20R823*1      |
| .082 uF  | .200          | .260 | .125 | .200 | M22R823*1      |
| .082 uF  | .300          | .360 | .150 | .200 | M30R823*1      |

| Capacity | Size (Inches) |      |      |      | Catalog Number |
|----------|---------------|------|------|------|----------------|
|          | L             | H    | T    | S    |                |
| .1 uF    | .200          | .260 | .125 | .100 | M20R104*1      |
| .1 uF    | .200          | .260 | .125 | .200 | M22R104*1      |
| .1 uF    | .300          | .360 | .150 | .200 | M30R104*1      |
| .12 uF   | .300          | .360 | .150 | .200 | M30R124*1      |
| .15 uF   | .300          | .360 | .150 | .200 | M30R154*1      |
| .18 uF   | .300          | .360 | .150 | .200 | M30R184*1      |
| .22 uF   | .300          | .360 | .150 | .200 | M30R224*1      |
| .27 uF   | .300          | .360 | .150 | .200 | M30R274*1      |
| .33 uF   | .300          | .360 | .150 | .200 | M30R334*1      |
| .33 uF   | .400          | .460 | .150 | .200 | M40R334*1      |
| .39 uF   | .300          | .360 | .150 | .200 | M30R394*1      |
| .39 uF   | .400          | .460 | .150 | .200 | M40R394*1      |
| .47 uF   | .300          | .360 | .150 | .200 | M30R474*1      |
| .47 uF   | .400          | .460 | .150 | .200 | M40R474*1      |
| .56 uF   | .400          | .460 | .150 | .200 | M40R564*1      |
| .68 uF   | .400          | .460 | .150 | .200 | M40R684*1      |
| .68 uF   | .500          | .560 | .200 | .400 | M50R684*1      |
| .82 uF   | .400          | .460 | .150 | .200 | M40R824*1      |
| .82 uF   | .500          | .560 | .200 | .400 | M50R824*1      |
| 1.0 uF   | .400          | .460 | .150 | .200 | M40R105*1      |
| 1.0 uF   | .500          | .560 | .200 | .400 | M50R105*1      |
| 1.2 uF   | .500          | .560 | .200 | .400 | M50R125*1      |

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

## X7R Temperature Coefficient 50 VDC

| Capacity | Size (Inches) |      |      |      | Catalog Number |
|----------|---------------|------|------|------|----------------|
|          | L             | H    | T    | S    |                |
| 3300 pF  | .150          | .210 | .100 | .100 | M15R332*5      |
| 3900 pF  | .150          | .210 | .100 | .100 | M15R392*5      |
| 4700 pF  | .150          | .210 | .100 | .100 | M15R472*5      |
| 5600 pF  | .150          | .210 | .100 | .100 | M15R562*5      |
| 6800 pF  | .150          | .210 | .100 | .100 | M15R682*5      |
| 8200 pF  | .150          | .210 | .100 | .100 | M15R822*5      |
| .01 uF   | .150          | .210 | .100 | .100 | M15R103*5      |
| .012 uF  | .150          | .210 | .100 | .100 | M15R123*5      |
| .012 uF  | .200          | .260 | .125 | .100 | M20R123*5      |
| .012 uF  | .200          | .260 | .125 | .200 | M22R123*5      |
| .015 uF  | .150          | .210 | .100 | .100 | M15R153*5      |
| .015 uF  | .200          | .260 | .125 | .100 | M20R153*5      |
| .015 uF  | .200          | .260 | .125 | .200 | M22R153*5      |
| .018 uF  | .150          | .210 | .100 | .100 | M15R183*5      |
| .018 uF  | .200          | .260 | .125 | .100 | M20R183*5      |
| .018 uF  | .200          | .260 | .125 | .200 | M22R183*5      |
| .022 uF  | .150          | .210 | .100 | .100 | M15R223*5      |
| .022 uF  | .200          | .260 | .125 | .100 | M20R223*5      |
| .022 uF  | .200          | .260 | .125 | .200 | M22R223*5      |
| .027 uF  | .150          | .210 | .100 | .100 | M15R273*5      |
| .027 uF  | .200          | .260 | .125 | .100 | M20R273*5      |
| .027 uF  | .200          | .260 | .125 | .200 | M22R273*5      |

| Capacity | Size (Inches) |      |      |      | Catalog Number |
|----------|---------------|------|------|------|----------------|
|          | L             | H    | T    | S    |                |
| .033 uF  | .150          | .210 | .100 | .100 | M15R333*5      |
| .033 uF  | .200          | .260 | .125 | .100 | M20R333*5      |
| .033 uF  | .200          | .260 | .125 | .200 | M22R333*5      |
| .039 uF  | .200          | .260 | .125 | .100 | M20R393*5      |
| .039 uF  | .200          | .260 | .125 | .200 | M22R393*5      |
| .047 uF  | .200          | .260 | .125 | .100 | M20R473*5      |
| .047 uF  | .200          | .260 | .125 | .200 | M22R473*5      |
| .056 uF  | .200          | .260 | .125 | .100 | M20R563*5      |
| .056 uF  | .200          | .260 | .125 | .200 | M22R563*5      |
| .068 uF  | .200          | .260 | .125 | .100 | M20R683*5      |
| .068 uF  | .200          | .260 | .125 | .200 | M22R683*5      |
| .082 uF  | .200          | .260 | .125 | .100 | M20R823*5      |
| .082 uF  | .200          | .260 | .125 | .200 | M22R823*5      |
| .1 uF    | .200          | .260 | .125 | .100 | M20R104*5      |
| .1 uF    | .200          | .260 | .125 | .200 | M22R104*5      |
| .12 uF   | .200          | .260 | .125 | .100 | M20R124*5      |
| .12 uF   | .200          | .260 | .125 | .200 | M22R124*5      |
| .15 uF   | .200          | .260 | .125 | .100 | M20R154*5      |
| .15 uF   | .200          | .260 | .125 | .200 | M22R154*5      |
| .15 uF   | .300          | .360 | .150 | .200 | M30R154*5      |
| .18 uF   | .200          | .260 | .125 | .100 | M20R184*5      |
| .18 uF   | .200          | .260 | .125 | .200 | M22R184*5      |
| .18 uF   | .300          | .360 | .150 | .200 | M30R184*5      |

| Capacity | Size (Inches) |      |      |      | Catalog Number |
|----------|---------------|------|------|------|----------------|
|          | L             | H    | T    | S    |                |
| .22 uF   | .200          | .260 | .125 | .100 | M20R224*5      |
| .22 uF   | .200          | .260 | .125 | .200 | M22R224*5      |
| .22 uF   | .300          | .360 | .150 | .200 | M30R224*5      |
| .27 uF   | .200          | .260 | .125 | .100 | M20R274*5      |
| .27 uF   | .200          | .260 | .125 | .200 | M22R274*5      |
| .27 uF   | .300          | .360 | .150 | .200 | M30R274*5      |
| .33 uF   | .300          | .360 | .150 | .200 | M30R334*5      |
| .39 uF   | .300          | .360 | .150 | .200 | M30R394*5      |
| .47 uF   | .300          | .360 | .150 | .200 | M30R474*5      |
| .56 uF   | .300          | .360 | .150 | .200 | M30R564*5      |
| .68 uF   | .300          | .360 | .150 | .200 | M30R684*5      |
| .82 uF   | .300          | .360 | .150 | .200 | M30R824*5      |
| 1.0 uF   | .300          | .360 | .150 | .200 | M30R105*5      |
| 1.0 uF   | .400          | .460 | .150 | .200 | M40R105*5      |
| 1.2 uF   | .400          | .460 | .150 | .200 | M40R125*5      |
| 1.5 uF   | .400          | .460 | .150 | .200 | M40R155*5      |
| 1.8 uF   | .400          | .460 | .150 | .200 | M40R185*5      |
| 2.2 uF   | .400          | .460 | .150 | .200 | M40R225*5      |
| 2.2 uF   | .500          | .560 | .200 | .400 | M50R225*5      |
| 2.7 uF   | .500          | .560 | .200 | .400 | M50R275*5      |
| 3.3 uF   | .500          | .560 | .200 | .400 | M50R335*5      |
| 3.9 uF   | .500          | .560 | .200 | .400 | M50R395*5      |

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:  
K =  $\pm 10\%$ , M =  $\pm 20\%$

# M15 to M50 Series Multilayer Ceramic Capacitors

**MALLORY**

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 pF  | .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 =  $\pm 20\%$ , 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      |

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:  
M =  $\pm 20\%$ , Z =  $+ 80\% - 20\%$ , P =  $+ 100\% - 0\%$