

# MULTILAYER (MONOLYTHIC) CERAMIC

## CML SERIES

The CML Series is a range of radial lead conformally coated non-polarized multilayer ceramic capacitors. These flame retardant capacitors are most commonly used for filtering, coupling, and bypass applications.

### RATINGS

**Capacitance Range:** 10pf to 2.2uf

**Voltage:** 50VDC and 100VDC

### PERFORMANCE SPECIFICATIONS

**Operating Temperature Range:**

Z5U +10°C to +85°C

X7R -55 °C to 125°C

NPO -55 °C to 125°C

**Tolerance Range:**

CML103M50 - CML225M50 ±20%

CML102K100 - CML154K100 ±10%

CML100J100 - CML473J100 ±5%

**Temperature Coefficient:**

CML103M50 - CML225M50 Z5U (+22%, -56%)

CML102K100 - CML154K100 X7R (±15%)

CML100J100 - CML473J100 NPO (Stable)

### ORDERING INFORMATION

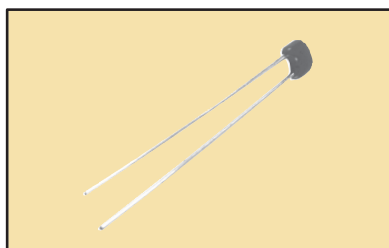
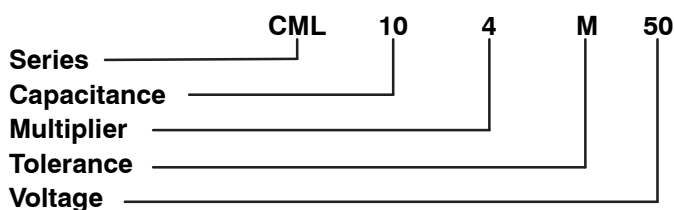
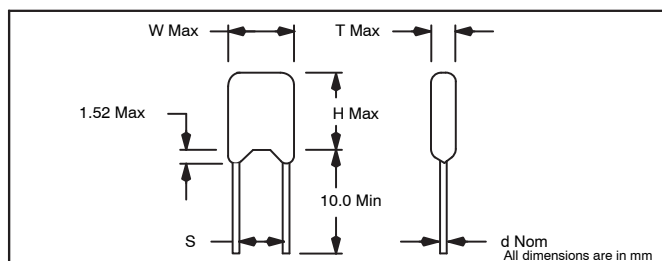


FIGURE 1



### MECHANICAL SPECIFICATIONS (Figure 1)

#### 50 Volt (Z5U) Series Dimensions (mm)

| Cap $\mu$ f | T     | H    | W    | S    | d    |
|-------------|-------|------|------|------|------|
| .01         | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .015        | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .022        | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .033        | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .047        | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .068        | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .10         | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .15         | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .22         | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .33         | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .47         | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .68         | 3.810 | 7.62 | 7.62 | 5.08 | .508 |
| 1.0         | 3.810 | 7.62 | 7.62 | 5.08 | .508 |
| 1.5         | 3.810 | 7.62 | 7.62 | 5.08 | .508 |
| 2.2         | 3.810 | 7.62 | 7.62 | 5.08 | .508 |

#### 100 Volt (X7R) Series Dimensions (mm)

| Cap $\mu$ f | T     | H    | W    | S    | d    |
|-------------|-------|------|------|------|------|
| .0010       | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .0015       | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .0022       | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .0033       | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .0047       | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .0068       | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .010        | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .015        | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .022        | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .033        | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .047        | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .068        | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .10         | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| .15         | 3.810 | 7.62 | 7.62 | 5.08 | .508 |
| .22         | 3.810 | 7.62 | 7.62 | 5.08 | .508 |
| .33         | 3.810 | 7.62 | 7.62 | 5.08 | .508 |
| .47         | 3.810 | 7.62 | 7.62 | 5.08 | .508 |
| .68         | 3.810 | 7.62 | 7.62 | 5.08 | .508 |
| 1.0         | 3.810 | 7.62 | 7.62 | 5.08 | .508 |

#### 100 Volt (NPO) Series Dimensions (mm)

| Cap pf  | T     | H    | W    | S    | d    |
|---------|-------|------|------|------|------|
| 10.0    | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 15.0    | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 22.0    | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 33.0    | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 47.0    | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 68.0    | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 100.0   | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 150.0   | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 220.0   | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 330.0   | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 470.0   | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 680.0   | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 1000.0  | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 1500.0  | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 2200.0  | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 3300.0  | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 4700.0  | 3.175 | 5.08 | 5.08 | 2.54 | .508 |
| 6800.0  | 3.810 | 7.62 | 7.62 | 5.08 | .508 |
| 10000.0 | 3.810 | 7.62 | 7.62 | 5.08 | .508 |
| 15000.0 | 3.810 | 7.62 | 7.62 | 5.08 | .508 |
| 22000.0 | 3.810 | 7.62 | 7.62 | 5.08 | .508 |
| 33000.0 | 3.810 | 7.62 | 7.62 | 5.08 | .508 |
| 47000.0 | 3.810 | 7.62 | 7.62 | 5.08 | .508 |