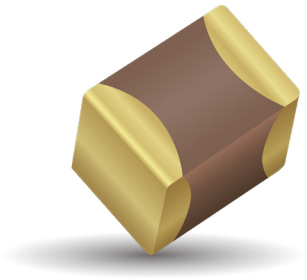
# MLCC Gold Termination — AU Series

## General Specifications



AVX Corporation will support those customers for commercial and military Multilayer Ceramic Capacitors with a termination consisting of Gold. This termination is indicated by the use of a "7" or "G" in the 12th position of the AVX Catalog Part Number. This fulfills AVX's commitment to providing a full range of products to our customers. Please contact the factory if you require additional information on our MLCC Gold Termination.

## PART NUMBER

| AU03 | Y | G | 104 | K | A | 7 | 2 | A |
|---|---|---|---|---|---|---|---|---|
| **Size**<br>AU02 - 0402<br>AU03 - 0603<br>AU05 - 0805<br>AU06 - 1206<br>AU10 - 1210<br>AU12 - 1812<br>AU13 - 1825<br>AU14 - 2225<br>AU16 - 0306<br>AU17 - 0508<br>AU18 - 0612 | **Voltage**<br>6.3V = 6<br>10V = Z<br>16V = Y<br>25V = 3<br>35V = D<br>50V = 5<br>100V = 1<br>200V = 2<br>500V = 7 | **Dielectric**<br>C0G (NP0) = A<br>X7R = C<br>X5R = D | **Capacitance Code (In pF)**<br>2 Sig. Digits + Number of Zeros | **Capacitance Tolerance**<br>B = ±.10 pF (<10pF)<br>C = ±.25 pF (<10pF)<br>D = ±.50 pF (<10pF)<br>F = ±1% (≥ 10 pF)<br>G = ±2% (≥ 10 pF)<br>J = ±5%<br>K = ±10%<br>M = ±20% | **Failure Rate**<br>A = Not Applicable | **Terminations**<br>G* =1.9 µ" to 7.87 µ"<br>7 = 100 µ" minimum | **Packaging**<br>2 = 7" Reel<br>4 = 13" Reel<br>U = 4mm TR (01005)<br>**Contact Factory For Multiples*** | **Special Code**<br>A = Std. Product |

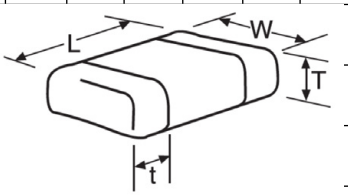
* Contact factory for availability.

# MLCC Gold Termination – AU Series

## Capacitance Range (NP0 Dielectric)

### PREFERRED SIZES ARE SHADED

| SIZE | | AU02 | | | AU03 | | | | AU05 | | | | | AU06 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Soldering | | Reflow/Epoxy/ Wire Bond* | | | Reflow/Epoxy/ Wire Bond* | | | | Reflow/Epoxy/ Wire Bond* | | | | | Reflow/Epoxy/ Wire Bond* | | | | | |
| Packaging | | All Paper | | | All Paper | | | | Paper/Embossed | | | | | Paper/Embossed | | | | | |
| (L) Length | mm | 1.00 ± 0.10 | | | 1.60 ± 0.15 | | | | 2.01 ± 0.20 | | | | | 3.20 ± 0.20 | | | | | |
| | (in.) | (0.040 ± 0.004) | | | (0.063 ± 0.006) | | | | (0.079 ± 0.008) | | | | | (0.126 ± 0.008) | | | | | |
| W) Width | mm | 0.50 ± 0.10 | | | 0.81 ± 0.15 | | | | 1.25 ± 0.20 | | | | | 1.60 ± 0.20 | | | | | |
| | (in.) | (0.020 ± 0.004) | | | (0.032 ± 0.006) | | | | (0.049 ± 0.008) | | | | | (0.063 ± 0.008) | | | | | |
| (t) Terminal | mm | 0.25 ± 0.15 | | | 0.35 ± 0.15 | | | | 0.50 ± 0.25 | | | | | 0.50 ± 0.25 | | | | | |
| | (in.) | (0.010 ± 0.006) | | | (0.014 ± 0.006) | | | | (0.020 ± 0.010) | | | | | (0.020 ± 0.010) | | | | | |
| | WVDC | 16 | 25 | 50 | 16 | 25 | 50 | 100 | 16 | 25 | 50 | 100 | 200 | 16 | 25 | 50 | 100 | 200 | 500 |
| Cap (pF) | 0.5 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 1.0 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 1.2 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 1.5 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 1.8 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 2.2 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 2.7 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 3.3 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 3.9 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 4.7 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 5.6 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 6.8 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 8.2 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 10 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 12 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 15 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 18 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 22 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 27 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 33 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 39 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 47 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 56 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 68 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 82 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 100 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 120 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 150 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 180 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | J |
| | 220 | C | C | C | G | G | G | G | J | J | J | J | J | J | J | J | J | J | M |
| | 270 | C | C | C | G | G | G | G | J | J | J | J | M | J | J | J | J | J | M |
| | 330 | C | C | C | G | G | G | G | J | J | J | J | M | J | J | J | J | J | M |
| | 390 | C | C | C | G | G | G | | J | J | J | J | M | J | J | J | J | J | M |
| | 470 | C | C | C | G | G | G | | J | J | J | J | M | J | J | J | J | J | M |
| | 560 | | | | G | G | G | | J | J | J | J | M | J | J | J | J | J | M |
| | 680 | | | | G | G | G | | J | J | J | J | M | J | J | J | J | J | P |
| | 820 | | | | G | G | G | | J | J | J | J | M | J | J | J | J | M | |
| | 1000 | | | | G | G | G | | J | J | J | J | M | J | J | J | J | Q | |
| | 1200 | | | | | | | | J | J | J | | | J | J | J | J | Q | |
| | 1500 | | | | | | | | J | J | J | | | J | J | J | M | Q | |
| | 1800 | | | | | | | | J | J | J | | | J | J | M | M | | |
| | 2200 | | | | | | | | J | J | N | | | J | J | M | P | | |
| | 2700 | | | | | | | | J | J | N | | | J | J | M | P | | |
| | 3300 | | | | | | | | J | J | | | | J | J | M | P | | |
| | 3900 | | | | | | | | J | J | | | | J | J | M | P | | |
| | 4700 | | | | | | | | J | J | | | | J | J | M | P | | |
| | 5600 | | | | | | | | | | | | | J | J | M | | | |
| | 6800 | | | | | | | | | | | | | M | M | | | | |
| | 8200 | | | | | | | | | | | | | M | M | | | | |
| | 0.010 | | | | | | | | | | | | | M | M | | | | |
| | 0.012 | | | | | | | | | | | | | | | | | | |
| | 0.015 | | | | | | | | | | | | | | | | | | |
| | 0.018 | | | | | | | | | | | | | | | | | | |
| | 0.022 | | | | | | | | | | | | | | | | | | |
| | 0.027 | | | | | | | | | | | | | | | | | | |
| | 0.033 | | | | | | | | | | | | | | | | | | |
| | 0.039 | | | | | | | | | | | | | | | | | | |
| | 0.047 | | | | | | | | | | | | | | | | | | |
| | 0.068 | | | | | | | | | | | | | | | | | | |
| | 0.082 | | | | | | | | | | | | | | | | | | |
| | 0.1 | | | | | | | | | | | | | | | | | | |
| | WVDC | 16 | 25 | 50 | 16 | 25 | 50 | 100 | 16 | 25 | 50 | 100 | 200 | 16 | 25 | 50 | 100 | 200 | 500 |
| SIZE | | AU02 | | | AU03 | | | | AU05 | | | | | AU06 | | | | | |




* Contact Factory

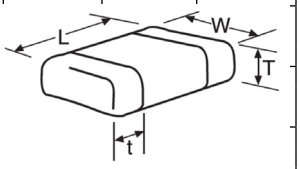
| Letter | A | C | E | G | J | K | M | N | P | Q | X | Y | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Max. Thickness | 0.33 (0.013) | 0.56 (0.022) | 0.71 (0.028) | 0.90 (0.035) | 0.94 (0.037) | 1.02 (0.040) | 1.27 (0.050) | 1.40 (0.055) | 1.52 (0.060) | 1.78 (0.070) | 2.29 (0.090) | 2.54 (0.100) | 2.79 (0.110) |
| | PAPER | | | | | EMBOSSED | | | | | | | |

# MLCC Gold Termination – AU Series

## Capacitance Range (NP0 Dielectric)

### PREFERRED SIZES ARE SHADED

| SIZE | | AU10 | | | | | AU12 | | | | | AU13 | | | AU14 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Soldering | | Reflow/Epoxy/ Wire Bond* | | | | | Reflow/Epoxy/ Wire Bond* | | | | | Reflow/Epoxy/ Wire Bond* | | | Reflow/Epoxy/ Wire Bond* | | |
| Packaging | | Paper/Embossed | | | | | All Embossed | | | | | All Embossed | | | All Embossed | | |
| (L) Length | mm | 3.20 ± 0.20 | | | | | 4.50 ± 0.30 | | | | | 4.50 ± 0.30 | | | 5.72 ± 0.25 | | |
| | (in.) | (0.126 ± 0.008) | | | | | (0.177 ± 0.012) | | | | | (0.177 ± 0.012) | | | (0.225 ± 0.010) | | |
| W) Width | mm | 2.50 ± 0.20 | | | | | 3.20 ± 0.20 | | | | | 6.40 ± 0.40 | | | 6.35 ± 0.25 | | |
| | (in.) | (0.098 ± 0.008) | | | | | (0.126 ± 0.008) | | | | | (0.252 ± 0.016) | | | (0.250 ± 0.010) | | |
| (t) Terminal | mm | 0.50 ± 0.25 | | | | | 0.61 ± 0.36 | | | | | 0.61 ± 0.36 | | | 0.64 ± 0.39 | | |
| | (in.) | (0.020 ± 0.010) | | | | | (0.024 ± 0.014) | | | | | (0.024 ± 0.014) | | | (0.025 ± 0.015) | | |
| | WVDC | 25 | 50 | 100 | 200 | 500 | 25 | 50 | 100 | 200 | 500 | 50 | 100 | 200 | 50 | 100 | 200 |
| Cap (pF) | 0.5 | | | | | | | | | | | | | | | | |
| | 1.0 | | | | | | | | | | | | | | | | |
| | 1.2 | | | | | | | | | | | | | | | | |
| | 1.5 | | | | | | | | | | | | | | | | |
| | 1.8 | | | | | | | | | | | | | | | | |
| | 2.2 | | | | | | | | | | | | | | | | |
| | 2.7 | | | | | | | | | | | | | | | | |
| | 3.3 | | | | | | | | | | | | | | | | |
| | 3.9 | | | | | | | | | | | | | | | | |
| | 4.7 | | | | | | | | | | | | | | | | |
| | 5.6 | | | | | | | | | | | | | | | | |
| | 6.8 | | | | | | | | | | | | | | | | |
| | 8.2 | | | | | | | | | | | | | | | | |
| | 10 | | | | | J | | | | | | | | | | | |
| | 12 | | | | | J | | | | | | | | | | | |
| | 15 | | | | | J | | | | | | | | | | | |
| | 18 | | | | | J | | | | | | | | | | | |
| | 22 | | | | | J | | | | | | | | | | | |
| | 27 | | | | | J | | | | | | | | | | | |
| | 33 | | | | | J | | | | | | | | | | | |
| | 39 | | | | | J | | | | | | | | | | | |
| | 47 | | | | | J | | | | | | | | | | | |
| | 56 | | | | | J | | | | | | | | | | | |
| | 68 | | | | | J | | | | | | | | | | | |
| | 82 | | | | | J | | | | | | | | | | | |
| | 100 | | | | | J | | | | | | | | | | | |
| | 120 | | | | | J | | | | | | | | | | | |
| | 150 | | | | | J | | | | | | | | | | | |
| | 180 | | | | | J | | | | | | | | | | | |
| | 220 | | | | | J | | | | | | | | | | | |
| | 270 | | | | | J | | | | | | | | | | | |
| | 330 | | | | | J | | | | | | | | | | | |
| | 390 | | | | | M | | | | | | | | | | | |
| | 470 | | | | | M | | | | | | | | | | | |
| | 560 | J | J | J | J | M | | | | | | | | | | | |
| | 680 | J | J | J | J | M | | | | | | | | | | | |
| | 820 | J | J | J | J | M | | | | | | | | | | | |
| | 1000 | J | J | J | J | M | K | K | K | K | M | M | M | M | M | M | P |
| | 1200 | J | J | J | M | M | K | K | K | K | M | M | M | M | M | M | P |
| | 1500 | J | J | J | M | M | K | K | K | K | M | M | M | M | M | M | P |
| | 1800 | J | J | J | M | | K | K | K | K | M | M | M | M | M | M | P |
| | 2200 | J | J | J | Q | | K | K | K | K | P | M | M | M | M | M | P |
| | 2700 | J | J | J | Q | | K | K | K | P | Q | M | M | M | M | M | P |
| | 3300 | J | J | J | | | K | K | K | P | Q | M | M | M | M | M | P |
| | 3900 | J | J | M | | | K | K | K | P | Q | M | M | M | M | M | P |
| | 4700 | J | J | M | | | K | K | K | P | Q | M | M | M | M | M | P |
| | 5600 | J | J | | | | K | K | M | P | X | M | M | M | M | M | P |
| | 6800 | J | J | | | | K | K | M | X | | M | M | M | M | M | P |
| | 8200 | J | J | | | | K | M | M | | | M | M | | M | M | P |
| | 0.010 | J | J | | | | K | M | M | | | M | M | | M | M | P |
| | 0.012 | J | J | | | | K | M | | | | M | M | | M | M | P |
| | 0.015 | | | | | | M | M | | | | M | M | | M | M | Y |
| | 0.018 | | | | | | M | M | | | | P | M | | M | M | Y |
| | 0.022 | | | | | | M | M | | | | P | | | M | Y | Y |
| | 0.027 | | | | | | M | M | | | | P | | | P | Y | Y |
| | 0.033 | | | | | | M | M | | | | P | | | P | | |
| | 0.039 | | | | | | M | M | | | | P | | | P | | |
| | 0.047 | | | | | | M | M | | | | P | | | P | | |
| | 0.068 | | | | | | M | M | | | | | | | P | | |
| | 0.082 | | | | | | M | M | | | | | | | Q | | |
| | 0.1 | | | | | | | | | | | | | | Q | | |
| | WVDC | 25 | 50 | 100 | 200 | 500 | 25 | 50 | 100 | 200 | 500 | 50 | 100 | 200 | 50 | 100 | 200 |
| SIZE | | AU10 | | | | | AU12 | | | | | AU13 | | | AU14 | | |




* Contact Factory

| Letter | A | C | E | G | J | K | M | N | P | Q | X | Y | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Max. Thickness | 0.33 (0.013) | 0.56 (0.022) | 0.71 (0.028) | 0.90 (0.035) | 0.94 (0.037) | 1.02 (0.040) | 1.27 (0.050) | 1.40 (0.055) | 1.52 (0.060) | 1.78 (0.070) | 2.29 (0.090) | 2.54 (0.100) | 2.79 (0.110) |
| | PAPER | | | | | EMBOSSED | | | | | | | |

# MLCC Gold Termination – AU Series

## Capacitance Range (X7R Dielectric)

### PREFERRED SIZES ARE SHADED

| SIZE | | AU02 | | | | AU03 | | | | | | | AU05 | | | | | | | AU06 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Soldering | | Reflow/Epoxy/ Wire Bond* | | | | Reflow/Epoxy/ Wire Bond* | | | | | | | Reflow/Epoxy/ Wire Bond* | | | | | | | Reflow/Epoxy/ Wire Bond* | | | | | | | |
| Packaging | | All Paper | | | | All Paper | | | | | | | Paper/Embossed | | | | | | | Paper/Embossed | | | | | | | |
| (L) Length | mm (in.) | 1.00 ± 0.10 (0.040 ± 0.004) | | | | 1.60 ± 0.15 (0.063 ± 0.006) | | | | | | | 2.01 ± 0.20 (0.079 ± 0.008) | | | | | | | 3.20 ± 0.20 (0.126 ± 0.008) | | | | | | | |
| W) Width | mm (in.) | 0.50 ± 0.10 (0.020 ± 0.004) | | | | 0.81 ± 0.15 (0.032 ± 0.006) | | | | | | | 1.25 ± 0.20 (0.049 ± 0.008) | | | | | | | 1.60 ± 0.20 (0.063 ± 0.008) | | | | | | | |
| (t) Terminal | mm (in.) | 0.25 ± 0.15 (0.010 ± 0.006) | | | | 0.35 ± 0.15 (0.014 ± 0.006) | | | | | | | 0.50 ± 0.25 (0.020 ± 0.010) | | | | | | | 0.50 ± 0.25 (0.020 ± 0.010) | | | | | | | |
| WVDC | | 10 | 16 | 25 | 50 | 63 | 10 | 16 | 25 | 50 | 100 | 200 | 63 | 10 | 16 | 25 | 50 | 100 | 200 | 63 | 10 | 16 | 25 | 50 | 100 | 200 | 500 |
| Cap (pF) | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 150 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 220 | | | | C | | | | G | | | | | | | | | | | | | | | | | | |
| | 330 | | | | C | | | | | G | G | G | | J | J | J | J | J | J | | | | | | | | K |
| | 470 | | | | C | | | | | G | G | G | | J | J | J | J | J | J | | | | | | | | K |
| | 680 | | | | C | | | | | G | G | G | | J | J | J | J | J | J | | | | | | | | K |
| | 1000 | | | | C | | | | | G | G | G | | J | J | J | J | J | J | | | | | | | | K |
| | 1500 | | | | C | | | | | G | G | | | J | J | J | J | J | J | | J | J | J | J | J | J | M |
| | 2200 | | | | C | | | | | G | G | | | J | J | J | J | J | J | | J | J | J | J | J | J | M |
| | 3300 | | | C | C | | | | | G | G | | | J | J | J | J | J | J | | J | J | J | J | J | J | M |
| | 4700 | | | C | C | | | | | G | G | | | J | J | J | J | J | J | | J | J | J | J | J | J | M |
| | 6800 | | C | C | | | | | | G | G | | | J | J | J | J | J | J | | J | J | J | J | J | J | P |
| Cap (µF) | 0.010 | | C | | | | | G | | G | G | | | J | J | J | J | J | J | | J | J | J | J | J | J | P |
| | 0.015 | | C | | | | | | G | G | | | | J | J | J | J | J | J | | J | J | J | J | J | M | |
| | 0.022 | C | C | | | | | | G | G | | | | J | J | J | J | J | N | | J | J | J | J | J | M | |
| | 0.033 | C | | | | | | | G | G | | | | J | J | J | J | N | | | J | J | J | J | J | M | |
| | 0.047 | | | | | | | G | G | G | | | | J | J | J | J | N | | | J | J | J | J | J | M | |
| | 0.068 | | | | | | | G | G | G | | | | J | J | J | J | N | | | J | J | J | J | J | P | |
| | 0.10 | | | | | | G | G | G | G | | | | J | J | J | J | | | | J | J | J | J | M | P | |
| | 0.15 | | | | | G | G | | | | | | | J | J | J | N | N | | | J | J | J | J | Q | | |
| | 0.22 | | | | | G | G | | | | | | | J | J | N | N | N | | | J | J | J | J | Q | | |
| | 0.33 | | | | | | | | | | | | | N | N | N | N | N | | | J | J | M | P | Q | | |
| | 0.47 | | | | | | | | | | | | | N | N | N | N | N | | | M | M | M | P | Q | | |
| | 0.68 | | | | | | | | | | | | | N | N | N | | | | | M | M | Q | Q | Q | | |
| | 1.0 | | | | | | | | | | | | | N | N | N | | | | | M | M | | Q | Q | | |
| | 1.5 | | | | | | | | | | | | | | | | | | | | P | Q | Q | | | | |
| | 2.2 | | | | | | | | | | | | | | | P* | | | | | Q | Q | Q | | | | |
| | 3.3 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4.7 | | | | | | | | | | | | | P* | | | | | | | Q | Q | | | | | |
| | 10 | | | | | | | | | | | | | | | | | | | | Q* | | | | | | |
| | 22 | | | | | | | | | | | | | | | | | | | Q* | | | | | | | |
| | 47 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WVDC | | 10 | 16 | 25 | 50 | 63 | 10 | 16 | 25 | 50 | 100 | 200 | 63 | 10 | 16 | 25 | 50 | 100 | 200 | 63 | 10 | 16 | 25 | 50 | 100 | 200 | 500 |
| SIZE | | | AU02 | | | AU03 | | | | | | | AU05 | | | | | | | AU06 | | | | | | | |

* Contact Factory

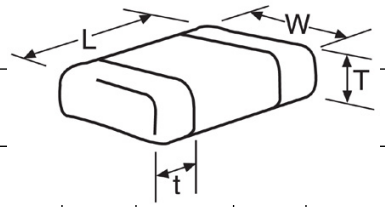
| Letter | A | C | E | G | J | K | M | N | P | Q | X | Y | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Max. Thickness | 0.33 (0.013) | 0.56 (0.022) | 0.71 (0.028) | 0.90 (0.035) | 0.94 (0.037) | 1.02 (0.040) | 1.27 (0.050) | 1.40 (0.055) | 1.52 (0.060) | 1.78 (0.070) | 2.29 (0.090) | 2.54 (0.100) | 2.79 (0.110) |
| | PAPER | | | | | EMBOSSED | | | | | | | |

# MLCC Gold Termination – AU Series

## Capacitance Range (X7R Dielectric)

### PREFERRED SIZES ARE SHADED

| SIZE | | AU10 | | | | | | | AU12 | | | | AU13 | | AU14 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Soldering | | Reflow/Epoxy/ Wire Bond* | | | | | | | Reflow/Epoxy/ Wire Bond* | | | | Reflow/Epoxy/ Wire Bond* | | Reflow/Epoxy/ Wire Bond* | |
| Packaging | | Paper/EmbosseU | | | | | | | All Embossed | | | | All Embossed | | All Embossed | |
| (L) Length | mm (in.) | 3.20 ± 0.20 (0.126 ± 0.008) | | | | | | | 4.50 ± 0.30 (0.177 ± 0.012) | | | | 4.50 ± 0.30 (0.177 ± 0.012) | | 5.72 ± 0.25 (0.225 ± 0.010) | |
| W) Width | mm (in.) | 2.50 ± 0.20 (0.098 ± 0.008) | | | | | | | 3.20 ± 0.20 (0.126 ± 0.008) | | | | 6.40 ± 0.40 (0.252 ± 0.016) | | 6.35 ± 0.25 (0.250 ± 0.010) | |
| (t) Terminal | mm (in.) | 0.50 ± 0.25 (0.020 ± 0.010) | | | | | | | 0.61 ± 0.36 (0.024 ± 0.014) | | | | 0.61 ± 0.36 (0.024 ± 0.014) | | 0.64 ± 0.39 (0.025 ± 0.015) | |
| WVDC | | 10 | 16 | 25 | 50 | 100 | 200 | 500 | 50 | 100 | 200 | 500 | 50 | 100 | 50 | 100 |
| Cap (pF) | 100 | | | | | | | | | | | | | | | |
| | 150 | | | | | | | | | | | | | | | |
| | 220 | | | | | | | | | | | | | | | |
| | 330 | | | | | | | | | | | | | | | |
| | 470 | | | | | | | | | | | | | | | |
| | 680 | | | | | | | | | | | | | | | |
| | 1000 | | | | | | | | | | | | | | | |
| | 1500 | J | J | J | J | J | J | M | | | | | | | | |
| | 2200 | J | J | J | J | J | J | M | | | | | | | | |
| | 3300 | J | J | J | J | J | J | M | | | | | | | | |
| | 4700 | J | J | J | J | J | J | M | | | | | | | | |
| | 6800 | J | J | J | J | J | J | M | | | | | | | | |
| Cap (µF) | 0.010 | J | J | J | J | J | J | M | K | K | K | K | M | M | M | P |
| | 0.015 | J | J | J | J | J | J | P | K | K | K | P | M | M | M | P |
| | 0.022 | J | J | J | J | J | J | Q | K | K | K | P | M | M | M | P |
| | 0.033 | J | J | J | J | J | J | Q | K | K | K | X | M | M | M | P |
| | 0.047 | J | J | J | J | J | J | | K | K | K | Z | M | M | M | P |
| | 0.068 | J | J | J | J | J | M | | K | K | K | Z | M | M | M | P |
| | 0.10 | J | J | J | J | J | M | | K | K | K | Z | M | M | M | P |
| | 0.15 | J | J | J | J | M | Z | | K | K | P | | M | M | M | P |
| | 0.22 | J | J | J | J | P | Z | | K | K | P | | M | M | M | P |
| | 0.33 | J | J | J | J | Q | | | K | M | X | | M | M | M | P |
| | 0.47 | M | M | M | M | Q | | | K | P | | | M | M | M | P |
| | 0.68 | M | M | P | X | X | | | M | Q | | | M | P | M | P |
| | 1.0 | N | N | | X | Z | | | M | X | | | M | P | M | P |
| | 1.5 | N | N | Z | Z | Z | | | Z | Z | | | M | | M | X |
| | 2.2 | X | X | Z | Z | Z | | | Z | Z | | | | | M | |
| | 3.3 | X | X | Z | Z | | | | Z | | | | | | | |
| | 4.7 | X | X | Z | Z | | | | Z | | | | | | | |
| | 10 | Z | Z | Z | | | | | | | | | | | | |
| | 22 | | | | | | | | | | | | | | | |
| | 47 | | | | | | | | | | | | | | | |
| | 100 | | | | | | | | | | | | | | | |
| WVDC | | 10 | 16 | 25 | 50 | 100 | 200 | 500 | 50 | 100 | 200 | 500 | 50 | 100 | 50 | 100 |
| SIZE | | AU10 | | | | | | | AU12 | | | | AU13 | | AU14 | |




* Contact Factory

| Letter | A | C | E | G | J | K | M | N | P | Q | X | Y | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Max. Thickness | 0.33 (0.013) | 0.56 (0.022) | 0.71 (0.028) | 0.90 (0.035) | 0.94 (0.037) | 1.02 (0.040) | 1.27 (0.050) | 1.40 (0.055) | 1.52 (0.060) | 1.78 (0.070) | 2.29 (0.090) | 2.54 (0.100) | 2.79 (0.110) |
| | PAPER | | | | | EMBOSSED | | | | | | | |

# MLCC Gold Termination – AU Series

## Capacitance Range (X5R Dielectric)

### PREFERRED SIZES ARE SHADED

| SIZE | | AU02 | | | | | | AU03 | | | | | | | AU05 | | | | | | AU06 | | | | | | AU10 | | | | | | | AU12 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Soldering | | Reflow/Epoxy Wire Bond* | | | | | | Reflow/Epoxy Wire Bond* | | | | | | | Reflow/Epoxy Wire Bond* | | | | | | Reflow/Epoxy Wire Bond* | | | | | | Reflow/Epoxy Wire Bond* | | | | | | | Reflow/Epoxy/ Wire Bond* | | | |
| Packaging | | All Paper | | | | | | All Paper | | | | | | | Paper/Embossed | | | | | | Paper/Embossed | | | | | | Paper/Embossed | | | | | | | All Embossed | | | |
| (L) Length | mm | 1.00 ± 0.10 | | | | | | 1.60 ± 0.15 | | | | | | | 2.01 ± 0.20 | | | | | | 3.20 ± 0.20 | | | | | | 3.20 ± 0.20 | | | | | | | 4.50 ± 0.30 | | | |
| | (in.) | (0.040 ± 0.004) | | | | | | (0.063 ± 0.006) | | | | | | | (0.079 ± 0.008) | | | | | | (0.126 ± 0.008) | | | | | | (0.126 ± 0.008) | | | | | | | (0.177 ± 0.012) | | | |
| W) Width | mm | 0.50 ± 0.10 | | | | | | 0.81 ± 0.15 | | | | | | | 1.25 ± 0.20 | | | | | | 1.60 ± 0.20 | | | | | | 2.50 ± 0.20 | | | | | | | 3.20 ± 0.20 | | | |
| | (in.) | (0.020 ± 0.004) | | | | | | (0.032 ± 0.006) | | | | | | | (0.049 ± 0.008) | | | | | | (0.063 ± 0.008) | | | | | | (0.098 ± 0.008) | | | | | | | (0.126 ± 0.008) | | | |
| (t) Terminal | mm | 0.25 ± 0.15 | | | | | | 0.35 ± 0.15 | | | | | | | 0.50 ± 0.25 | | | | | | 0.50 ± 0.25 | | | | | | 0.50 ± 0.25 | | | | | | | 0.61 ± 0.36 | | | |
| | (in.) | (0.010 ± 0.006) | | | | | | (0.014 ± 0.006) | | | | | | | (0.020 ± 0.010) | | | | | | (0.020 ± 0.010) | | | | | | (0.020 ± 0.010) | | | | | | | (0.024 ± 0.014) | | | |
| WVDC | | 4 | 63 | 10 | 16 | 25 | 50 | 4 | 63 | 10 | 16 | 25 | 35 | 50 | 63 | 10 | 16 | 25 | 35 | 50 | 6.3 | 10 | 16 | 25 | 35 | 50 | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | 6.3 | 10 | 25 | 50 |
| Cap (pF) | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 150 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 220 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 330 | | | | | | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 470 | | | | | | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 680 | | | | | | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1000 | | | | | | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1500 | | | | | | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2200 | | | | | | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3300 | | | | | | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4700 | | | | | C | | | | | | | | G | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6800 | | | | | C | | | | | | | | G | | | | | | | | | | | | | | | | | | | | | | | | |
| Cap (µF) | 0.010 | | | | | C | | | | | | | | G | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0.015 | | | | | C | | | | | | G | G | G | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0.022 | | | | C | C | | | | | | G | G | G | | | | | | N | | | | | | | | | | | | | | | | | | |
| | 0.033 | | | | C | | | | | | | G | G | G | | | | | | N | | | | | | | | | | | | | | | | | | |
| | 0.047 | | | | C | C | | | | | | G | G | G | | | | | | N | | | | | | | | | | | | | | | | | | |
| | 0.068 | | | | C | | | | | | | G | | G | | | | | | N | | | | | | | | | | | | | | | | | | |
| | 0.10 | | C | | C | C | | | | | | G | | G | | | | N | | N | | | | | | | | | | | | | | | | | | |
| | 0.15 | | | | | | | | | | | G | | | | | | N | N | | | | | | | | | | | | | | | | | | | |
| | 0.22 | | C* | | | | | | | | G | G | | | | | | N | N | | | | | | | | | | | | | | | | | | | |
| | 0.33 | | | | | | | | | | G | G | | | | | | N | | | | | | | Q | | | | | | | | | | | | | |
| | 0.47 | C* | | | | | | | | | G | | | | | | | N | | | | | | Q | Q | | | | | | | | | | | | | |
| | 0.68 | | | | | | | | | | G | | | | | | | N | | | | | | | | | | | | | | X | | | | | | |
| | 1.0 | | | | | | | | G | G | G | J* | | | N | | N | N | | P* | | | | Q | Q | | | | | X | X | X | | | | | |
| | 1.5 | | | | | | | | | | | | | | N | | | | | | | | | | | | | | | | | | | | | | | |
| | 2.2 | C* | | | | | | G* | G* | J* | J* | | | | N | N | N | N | | | | | Q | Q | | | | | | Z | X | | | | | | | |
| | 3.3 | | | | | | | J* | J* | J* | J* | | | | N | N | | | | | Q | Q | | | | | | | | | | | | | | | | |
| | 4.7 | | | | | | | J* | J* | J* | | | | | | N | N* | N* | | | Q | Q | Q | Q | | | | | | Q | Z | | | | | | | |
| | 10 | | | | | | | K* | | | | | | | P* | P* | P* | | | | Q | Q | Q | Q* | | | | | X | Z | Z | | | | | | Z | |
| | 22 | | | | | | | | | | | | | | P* | | | | | | Q* | Q* | Q* | | | | | Z | Z | Z | Z | | | | | | | |
| | 47 | | | | | | | | | | | | | | | | | | | | Q* | | | | | | | Z* | | | | | | | | | | |
| | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | Z* | Z* | | | | | | | | | | |
| WVDC | | 4 | 63 | 10 | 16 | 25 | 50 | 4 | 63 | 10 | 16 | 25 | 35 | 50 | 63 | 10 | 16 | 25 | 35 | 50 | 6.3 | 10 | 16 | 25 | 35 | 50 | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | 6.3 | 10 | 25 | 50 |
| SIZE | | AU02 | | | | | | AU03 | | | | | | | AU05 | | | | | | AU06 | | | | | | AU10 | | | | | | | AU12 | | | |

* Contact Factory

| Letter | A | C | E | G | J | K | M | N | P | Q | X | Y | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Max. Thickness | 0.33 (0.013) | 0.56 (0.022) | 0.71 (0.028) | 0.90 (0.035) | 0.94 (0.037) | 1.02 (0.040) | 1.27 (0.050) | 1.40 (0.055) | 1.52 (0.060) | 1.78 (0.070) | 2.29 (0.090) | 2.54 (0.100) | 2.79 (0.110) |
| | PAPER | | | | | EMBOSSED | | | | | | | |

= ***Optional Specifications – Contact Factory**

NOTE: Contact factory for non-specified capacitance values

| SIZE | | AU16 (0306) | | | | | AU17 (0508) | | | | | AU18 (0612) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Packaging | | Embossed | | | | | Embossed | | | | | Embossed | | | | |
| Length | mm (in.) | 0.81 ± 0.15 (0.032 ± 0.006) | | | | | 1.27 ± 0.25 (0.050 ± 0.010) | | | | | 1.60 ± 0.25 (0.063 ± 0.010) | | | | |
| Width | mm (in.) | 1.60 ± 0.15 (0.063 ± 0.006) | | | | | 2.00 ± 0.25 (0.080 ± 0.010) | | | | | 3.20 ± 0.25 (0.126 ± 0.010) | | | | |
| Cap Code | WVDC | 4 | 6.3 | 10 | 16 | 25 | 6.3 | 10 | 16 | 25 | 50 | 6.3 | 10 | 16 | 25 | 50 |
| 102 | Cap 0.001 | | A | A | A | A | S | S | S | S | V | S | S | S | S | V |
| 222 | (µF) .0022 | | A | A | A | A | S | S | S | S | V | S | S | S | S | V |
| 332 | 0.0033 | | A | A | A | A | S | S | S | S | V | S | S | S | S | V |
| 472 | 0.0047 | | A | A | A | A | S | S | S | S | V | S | S | S | S | V |
| 682 | 0.0068 | | A | A | A | A | S | S | S | S | V | S | S | S | S | V |
| 103 | 0.01 | | A | A | A | A | S | S | S | S | V | S | S | S | S | V |
| 153 | 0.015 | | A | A | A | A | S | S | S | S | V | S | S | S | S | W |
| 223 | 0.022 | | A | A | A | A | S | S | S | S | V | S | S | S | S | W |
| 333 | 0.033 | | A | A | A | | S | S | S | V | V | S | S | S | S | W |
| 473 | 0.047 | | A | A | A | | S | S | S | V | A | S | S | S | S | W |
| 683 | 0.068 | | A | A | A | | S | S | S | A | A | S | S | S | V | W |
| 104 | 0.1 | | A | A | A | | S | S | V | A | A | S | S | S | V | W |
| 154 | 0.15 | | A | A | | | S | S | V | | | S | S | S | W | W |
| 224 | 0.22 | | A | A | | | S | S | A | | | S | S | V | W | |
| 334 | 0.33 | | | | | | V | V | A | | | S | S | V | | |
| 474 | 0.47 | | | | | | V | V | A | | | S | S | V | | |
| 684 | 0.68 | | | | | | A | A | | | | V | V | W | | |
| 105 | 1 | A | | | | | A | A | | | | V | V | A | | |
| 155 | 1.5 | | | | | | A | | | | | W | W | | | |
| 225 | 2.2 | | | | | | | | | | | A | A | | | |
| 335 | 3.3 | | | | | | | | | | | A | | | | |
| 475 | 4.7 | | | | | | | | | | | | | | | |
| 685 | 6.8 | | | | | | | | | | | | | | | |
| 106 | 10 | | | | | | | | | | | | | | | |

**Solid = X7R** **= X5R** **= X7S**

mm (in.)

| AU16 (0306) | |
|---|---|
| Code | Thickness |
| A | 0.56 (0.022) |

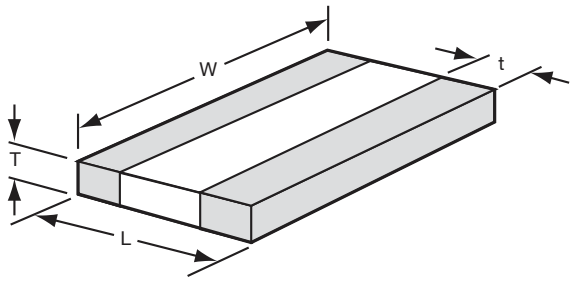
mm (in.)

| AU16 (0508) | |
|---|---|
| Code | Thickness |
| S | 0.56 (0.022) |
| V | 0.76 (0.030) |
| A | 1.02 (0.040) |

mm (in.)

| AU16 (0612) | |
|---|---|
| Code | Thickness |
| S | 0.56 (0.022) |
| V | 0.76 (0.030) |
| W | 1.02 (0.040) |
| A | 1.27 (0.050) |

## PHYSICAL DIMENSIONS AND PAD LAYOUT




## PHYSICAL DIMENSIONS MM (IN.)

| | L | W | t |
|---|---|---|---|
| AU16 (0306) | 0.81 ± 0.15 (0.032 ± 0.006) | 1.60 ± 0.15 (0.063 ± 0.006) | 0.13 min. (0.005 min.) |
| AU17 (0508) | 1.27 ± 0.25 (0.050 ± 0.010) | 2.00 ± 0.25 (0.080 ± 0.010) | 0.13 min. (0.005 min.) |
| AU18 (0612) | 1.60 ± 0.25 (0.063 ± 0.010) | 3.20 ± 0.25 (0.126 ± 0.010) | 0.13 min. (0.005 min.) |

T - See Range Chart for Thickness and Codes

## PAD LAYOUT DIMENSIONS MM (IN.)

| | A | B | C |
|---|---|---|---|
| AU16 (0306) | 0.31 (0.012) | 1.52 (0.060) | 0.51 (0.020) |
| AU17 (0508) | 0.51 (0.020) | 2.03 (0.080) | 0.51 (0.020) |
| AU18 (0612) | 0.76 (0.030) | 3.05 (0.120) | 0.635 (0.025) |