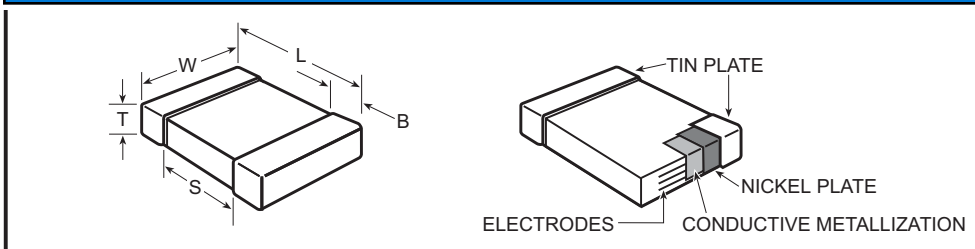


Surface Mount Ceramic Chip Capacitors – Low Profile MLCC

Outline Drawing



Dimensions – Millimeters (Inches)

| EIA Size Code | Metric Size Code | L Length | W Width | B Bandwidth | S Separation |
|---------------|------------------|-------------------------|--------------------------|-------------------------|--------------|
| 0805 | 2012 | 2.0 (.079) ± 0.2 (.008) | 1.25 (.049) ± 0.2 (.008) | 0.5 (.02) ± 0.25 (.010) | - |
| 1206 | 3216 | 3.2 (.126) ± 0.2 (.008) | 1.6 (.063) ± 0.2 (.008) | 0.5 (.02) ± 0.25 (.010) | - |

See Capacitance Value Table for thickness dimension.

Capacitance Values - X5R Dielectric

| Capacitance Value (µF) | KEMET Part Number | Voltage | Capacitance Tolerance | Thickness | Qty 7" Reel |
|------------------------|-------------------|---------|-----------------------|--------------------------|-------------|
| 4.7 | C0805L475(1)9PAC | 6.3 | ±10%, ±20% | 0.85 (.033) ± 0.1 (.004) | 4,000 |
| 10.0 | C0805L106(1)9PAC | 6.3 | ±10%, ±20% | 0.85 (.033) ± 0.1 (.004) | 4,000 |
| 10.0 | C0805L106(1)8PAC | 10 | ±10%, ±20% | 0.85 (.033) ± 0.1 (.004) | 4,000 |
| 1.0 | C1206L105(1)3PAC | 25 | ±10%, ±20% | 0.78 (.031) ± 0.1 (.004) | 4,000 |
| 4.7 | C1206L475(1)4PAC | 16 | ±10%, ±20% | 0.90 (.035) ± 0.1 (.004) | 4,000 |

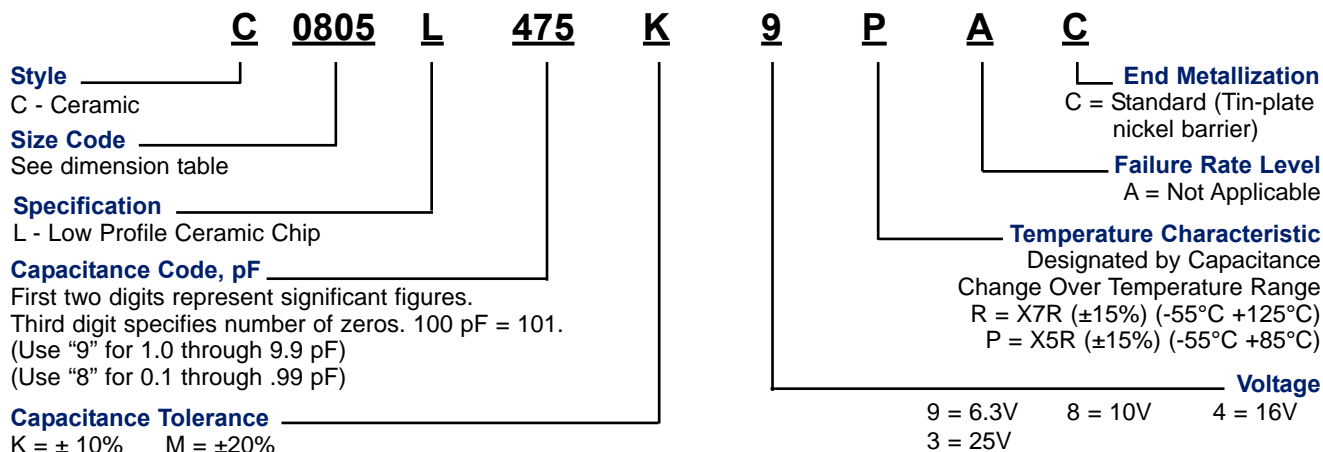
(1) To complete KEMET part number insert K for ±10% or M for ±20% capacitance tolerance.

Capacitance Values - X7R Dielectric

| Capacitance Value (µF) | KEMET Part Number | Voltage | Capacitance Tolerance | Thickness | Qty 7" Reel |
|------------------------|-------------------|---------|-----------------------|--------------------------|-------------|
| 1.0 | C0805L105(1)8RAC | 10 | ±10%, ±20% | 0.78 (.031) ± 0.1 (.004) | 4,000 |

(1) To complete KEMET part number insert K for ±10% or M for ±20% capacitance tolerance.

Capacitor Ordering Information



Electrical Parameters - X5R Dielectric

As detailed in the KEMET Surface Mount Catalog F3102 for X5R, with following specific requirements based on room temperature (25°C) parameters:

- Operating Range: -55°C to +85°C, with no-bias capacitance shift limited to $\pm 15\%$ over that range.
- Insulation Resistance (IR) measured after 2 minutes at rated voltage @ 25°C: Limit is 500 megohm microfarads or 10000M Ω , whichever is less.
- Capacitance and Dissipation Factor (DF) measured at the following conditions. DF Limit is 10%.
1 kHz and 1 Vrms.

Electrical Parameters - X7R Dielectric

As detailed in the KEMET Surface Mount Catalog F3102 for X7R, with following specific requirements based on room temperature (25°C) parameters:

- Operating Range: -55°C to +125°C, with no-bias capacitance shift limited to $\pm 15\%$ over that range.
- Insulation Resistance (IR) measured after 2 minutes at rated voltage @ 25°C: Limit is 500 megohm microfarads or 10000M Ω , whichever is less.
- Capacitance and Dissipation Factor (DF) measured at the following conditions. DF Limit is 5%.
1 kHz and 1 Vrms.

Soldering Process

These components are suitable for reflow only. All parts incorporate the standard KEMET barrier layer of pure nickel, with an overplate of pure tin to provide excellent solderability as well as resistance to leaching.

Marking

These chips will be supplied unmarked.

In general, the information in the KEMET Surface Mount catalog F3102 applies to these capacitors. The information in this bulletin supplements that in the catalog.