RADIAL-LEADED, EPOXY-DIPPED MULTILAYER CERAMIC CAPACITORS

RoHs Compliant

TYPICAL PERFORMANCE CHARACTERISTICS

TEMPERATURE COEFFICIENT:

NPO/COG: ± 30PPM / °C, -55°C to 125°C
X7R: ±15%, -55°C to +125°C
Z5U: +22%, -56%, +10°C to +85°C
Y5V: +22%, -82%, -30°C to 85°C

CAPACITANCE TEST AT 25°C:

NPO/COG: 1 VRMS max at 1KHz (1MHz for 100pF or less)
X7R: 1 VRMS max at 1KHz
Z5U: 1 VRMS max at 1KHz
Y5V: 1 VRMS max at 1KHz

DISSIPATION FACTOR 25C:

NPO/COG: 0.15% max at 1KHz, 1 VRMS max(1MHz for 1000pF or less)
X7R: (at 1KHz, 1 VRMS)

Max	Rated Voltage
2.5%	≥50V
3.5%	25V & 16V
5.0%	10V & 6.3V

Z5U: 5% max (at 1KHz, 1 VRMS max)
Y5V: (at 1KHz, 1 VRMS max)

Max	Rated Voltage
5%	≥50V
7%	25V & 16V
10%	10V & 6.3V

DIELECTRIC STRENGTH 25°C (FLASH TEST):

NPO/COG and X7R: 300% rated voltage for 5 seconds with 50 mA max charging current.
Z5U and Y5V: 250% rated voltage for 5 seconds with 50 mA max charging current.

LIFE TEST: (1000hrs at max temp. applied with Flash test voltage, Recovery: 6-24hrs for NPO and 24±2hrs for X7R & Z5U)

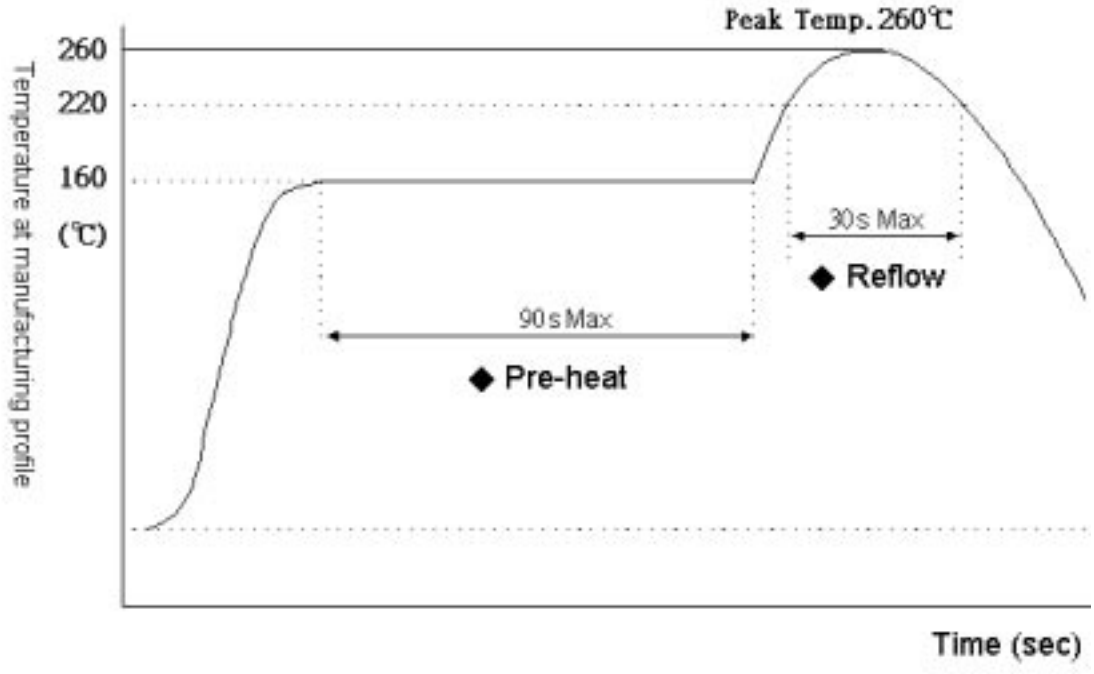
NPO/COG: ≤ ±3% at 200% rated voltage, 125°C
X7R: ≤ ±3% at 200% rated voltage, 125°C
Z5U: ≤ ±3% at 200% rated voltage, 85°C
Y5V: ≤ ±3% at 200% rated voltage, 85°C

INSULATION RESISTANCE AFTER 60SEC, CHARGIN AT RATED VOLTAGE, 25°C, 55% R.H. MAX:

NPO/COG: 100GΩ or 1000MΩ-uF whichever is less
X7R: 10GΩ or 100MΩ-uF whichever is less
Z5U: 10GΩ or 100MΩ-uF whichever is less
Y5V: 10GΩ or 1000MΩ-uF whichever is less

SOLDERING PROFILE RADIAL LEADED TYPE

Soldering heat resistance as below temperature profile.
Solder iron 400°C 4~5 sec.
Solderability 235°C, 3 ± 1 sec, 95% coverage min.



Pre-heating shall be done less then +150°C within 90 seconds.
The temperature at capacitor top shall not exceed +260°C.
The duration of over +220°C temperature at component top shall not exceed 30 seconds.
The standard temperature profile differs by each reflow method.

If components are subject to the conditions beyond the allowable range of reflow, please contact us.