

RADIAL LEADED, EXPOXY DIPPED MULTILAYER CERAMIC CAPACITORS

ELECTRICAL SPECIFICATIONS

Capacitance Range: 1pF to 10uF

Capacitance Tolerance: [standard]

NPO: F =±1%

G =±2%

C =±0.25 PF [10PF and below]

D =±0.5PF [10PF and below]

J =±5% [10PF and above]

K =±10% [5.6PF and above]

M=±20% [2.7PF and above]

X7R: K =±10%

M =±20%

Z = -20% ~ +80%

Z5U: M =±20%

Z = -20% ~ +80%

Working Voltage: 25, 50, 100, 200, 1K VDC

Temperature Characteristic:

NPO: 0±30ppm°C, -55°C to +125°C

X7R: ±15% ΔC, -55°C to +125°C

Z5U: +22% to -56% ΔC, +10°C to +85°C

Insulation Resistance

NPO, X7R: 100,000 mega ohms min. or 1000 ohm-farads min., whichever is less at 25°C

Z5U: 10,000 mega ohms or 1000 ohm-Farads min., whichever is less at 25°C

MECHANICAL SPECIFICATION

Cast: conformal coated [epoxy]

Lead Material: Solder coated, copper

Package Method: Bulk, Tape & Ammo Pack.

Solder ability: [MIL-STD-202, Method 208]

Leach Resistance: Temp 230°C, 20Seconds immersion in SN62

*STANDARD TOLERANCE

NPO: J, K

X7R: K, M

Z5U: M, Z

Capacitance Test @ 25°C or referred to +25°C:

NPO, X7R:

1.0VRMS±. 25VRMS and 1KHz;

1MHz for value below 100PF

Z5U: 0.5 VRMS maximum and 1 KHz

Dissipation Factor:

NPO: 0.1% maximum @ 25°C, 1.0VRMS ±25

VRM and 1 KHz, 1 KHz for values below 100PF.

X7R: 2.5% maximum @ 25°C, 1.0VRMS ±25

VRM and 1 KHz.

Z5U: 4% maximum @ 25°C, 0.5VRMS

maximum charging current.

Life Test: [1000 hrs]

Dielectric Strength:

NPO, X7R: 250% rated voltage with 50 mA maximum charging current.

Z5U: 200% rated voltage with 50 mA maximum charging current.

Life Test: [1000 hrs]

NPO and X7R: 200% rated voltage at +125°C

Z5U: 150% rated voltage at +85°C

Humidity Resistance:

[MIL-STD-202 Method 106]

NPO, X7R, Z5U: 96 hrs at 40°C relative humidity 90~95%

Thermal Shock:

[MIL-STD-202 Method 107, condition

