

## Multilayer Ceramic Chip Capacitors Low Inductance



### FEATURES

- Low inductance, typically half the inductance of standard product.
- Reduces AC noise in multi-chip modules (MCM).
- Low profile, robust device for easy mounting.

### GENERAL SPECIFICATIONS

**NOTE:** Electrical characteristics at + 25 °C unless otherwise specified.

**Capacitance Range:** 8200 pF to 0.33  $\mu$ F.

**Inductance:** 0.4 nH.

**Temperature Coefficient of Capacitance (TCC):**  
 $\pm 15\%$  from - 55 °C to + 125 °C.

**Dissipation Factor (DF):**

25 V ratings, 3.5 % maximum at 1.0 V<sub>rms</sub> and 1kHz.  
50 V ratings, 2.5 % maximum at 1.0 V<sub>rms</sub> and 1kHz.

**Aging Rate:** 1 % maximum per decade.

**Insulation Resistance (IR):**

At + 25 °C and rated voltage 100,000 M $\Omega$  minimum or 1000  $\Omega$ F, whichever is less.

At + 125 °C and rated voltage 10,000 M $\Omega$  minimum or 100  $\Omega$ F, whichever is less.

**Dielectric Withstanding Voltage (DWV):**

This is the maximum voltage the capacitors are tested for a 1 to 5 second period and the charge/discharge current does not exceed 50mA

$\leq 50$ V DC : DWV at 250 % of rated voltage.

### ORDERING INFORMATION

VJ0612	Y	104	K	X	A	A	T
CASE CODE	DIELECTRIC	CAPACITANCE NOMINAL CODE	CAPACITANCE TOLERANCE	TERMINATION	DC VOLTAGE RATING	MARKING	PACKAGING
0612	Y = X7R	Expressed in picofarads (pF). The first two digits are significant, the third is a multiplier. <b>Example:</b> 104 = 100 000 pF	J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	X = Ni barrier 100% tin plated.	J = 16 V X = 25 V A = 50 V	A = Unmarked	T = 7" reel / plastic tape C = 7" reel / paper tape R = 11 1/4" reel / plastic tape P = 11 1/4" reel / paper tape

**Note**

1. DC voltage rating should not be exceeded in application

CAPACITANCE VS VOLTAGE				
CAPACITANCE CODE	CAPACITANCE	VJ0612		
		VOLTAGE (Vdc)	VOLTAGE (Vdc)	VOLTAGE (Vdc)
		16	25	50
822	8200 pF			
103	0.010 $\mu$ F			
123	0.012 $\mu$ F			
153	0.015 $\mu$ F			
183	0.018 $\mu$ F			
223	0.022 $\mu$ F			
273	0.027 $\mu$ F			
333	0.033 $\mu$ F			
393	0.039 $\mu$ F			
473	0.047 $\mu$ F			
563	0.056 $\mu$ F			
683	0.068 $\mu$ F			
823	0.082 $\mu$ F			
104	0.10 $\mu$ F			
124	0.12 $\mu$ F			
154	0.15 $\mu$ F			
184	0.18 $\mu$ F			
224	0.22 $\mu$ F			
274	0.27 $\mu$ F			
334	0.33 $\mu$ F			

**TYPICAL PARAMETERS**
