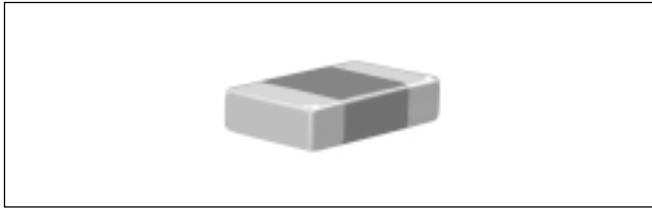


Multilayer Ceramic Chip Capacitors



FEATURES

- High voltage ratings.
- Low ESR designs.
- Ideal for surge suppression and high voltage applications.

GENERAL SPECIFICATIONS

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

Capacitance Range:

330pF to 1.8μF.

Temperature Coefficient of Capacitance (TCC):

± 15% from - 55°C to + 125°C.

Dissipation Factor (DF):

2.5% maximum @ 1.0 Vrms and 1kHz.

Insulation Resistance (IR):

@ + 25°C and rated voltage 100,000 Megohms minimum or 1000 ohm-farads, whichever is less.

@ + 125°C and rated voltage 10,000 Megohms minimum or 100 ohm-farads, whichever is less.

Dielectric Withstanding Voltage (DWV):

200V: 250% rated voltage for 5 ± 1 seconds, 50 milliamps current maximum.

500V: 200% rated voltage for 5 ± 1 seconds, 50 milliamps current maximum.

1000V: 150% rated voltage for 5 ± 1 seconds, 50 milliamps current maximum.

Aging Rate: 1% maximum per decade.

ORDERING INFORMATION

VJ	1812	Y	472	K	X	E	A	T
PRODUCT SERIES	CASE SIZE	DIELECTRIC	CAPACITANCE NOMINAL CODE	CAPACITANCE TOLERANCE	TERMINATION	DC VOLTAGE RATING	MARKING	PACKAGING ¹
VJ = MLCC	0603 0805 1206 1210 1808 1812 1825 2220 2225 3640 ²	Y = X7R	Expressed in picofarads (pF). The first two digits are significant, the third is a multiplier. Example: 472 = 1000pF.	J = ± 5% K = ± 10% M = ± 20%	X = Nickel barrier with 100% tin plated finish F = Palladium silver	C = 200V E = 500V G = 1000V	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 B = Bulk NOTE: 0402 and 0603 available in paper tape only

¹See page 57 for cassette case packaged capacitors.

²Please contact factory for special considerations regarding 3640-size components.

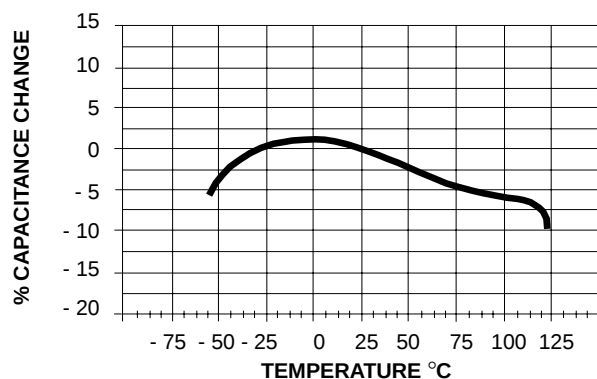


X7R DIELECTRIC - HIGH VOLTAGE																											
STYLE		VJ0603		VJ0805		VJ1206		VJ1210		VJ1808			VJ1812*			VJ1825*			VJ2220*			VJ2225*			VJ3640*		
E.I.A. TYPE		0603		0805		1206		1210		—			1812			1825			—			—			—		
VOLTAGE (Vdc)		200	—	200	—	200	500	200	500	200	500	1000	200	500	1000	200	500	1000	200	500	200	500	1000	200	500		
Cap. Code	Capacitance																										
101	100pF																										
121	120pF																										
151	150pF																										
181	180pF																										
221	220pF																										
271	270pF																										
331	330pF																										
391	390pF																										
471	470pF																										
561	560pF																										
681	680pF																										
821	820pF																										
102	1000pF																										
122	1200pF																										
152	1500pF																										
182	1800pF																										
222	2200pF																										
272	2700pF																										
332	3300pF																										
392	3900pF																										
472	4700pF																										
562	5600pF																										
682	6800pF																										
822	8200pF																										
103	.010μF																										
123	.012μF																										
153	.015μF																										
183	.018μF																										
223	.022μF																										
273	.027μF																										
333	.033μF																										
393	.039μF																										
473	.047μF																										
563	.056μF																										
683	.068μF																										
823	.082μF																										
104	.10μF																										
124	.12μF																										
154	.15μF																										
184	.18μF																										
224	.22μF																										
274	.27μF																										
334	.33μF																										
394	.39μF																										
474	.47μF																										
564	.56μF																										
684	.68μF																										
824	.82μF																										
105	1.0μF																										
125	1.2μF																										
155	1.5μF																										
185	1.8μF																										

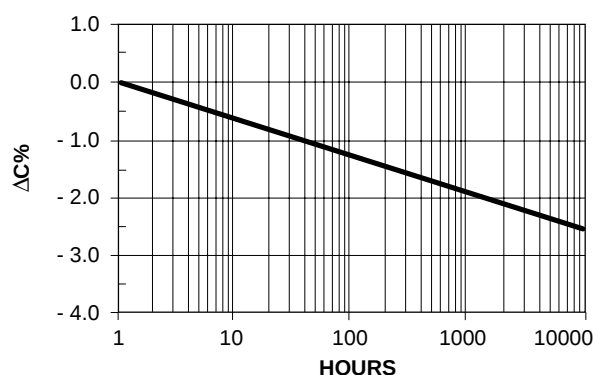
*See page 61 for soldering recommendations.

X7R DIELECTRIC - HIGH VOLTAGE - TYPICAL PARAMETERS

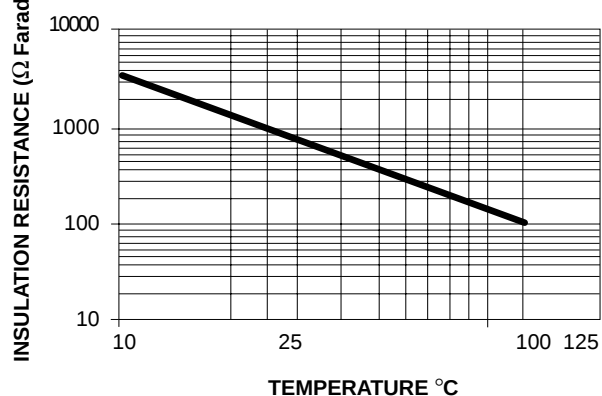
TEMPERATURE COEFFICIENT
OF CAPACITANCE



AGING RATE - X7R



MINIMUM INSULATION
RESISTANCE vs TEMPERATURE



VOLTAGE COEFFICIENT OF CAPACITANCE
1000V RATED

