

Multilayer Ceramic Chip Capacitors



FEATURES

- High voltage ratings.
- Stable C0G dielectric.
- Ideal for snubber and surge suppression applications.

GENERAL SPECIFICATIONS

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

Capacitance Range: 1.0pF to 0.039μF.

Temperature Coefficient of Capacitance (TCC):

0 ± 30PPM/°C from - 55°C to + 125°C.

Dissipation Factor (DF):

0.1% maximum @ 1.0 Vrms and 1kHz for values > 1000pF.

0.1% maximum @ 1.0 Vrms and 1MHz for values ≤ 1000pF.

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

ORDERING INFORMATION

VJ	0805	A	102	K	X	C	A	T
PRODUCT SERIES	CASE SIZE	DIELECTRIC	CAPACITANCE NOMINAL CODE	CAPACITANCE TOLERANCE	TERMINATION	DC VOLTAGE RATING	MARKING	PACKAGING*
VJ = MLCC	0603 0805 1206 1210 1808 1812 1825 2220 2225	A = C0G (NPO)	Expressed in picofarads (pF). The first two digits are significant, the third is a multiplier. An "R" indicates a decimal point. Examples: 102 = 1000pF. 1R8 = 1.8pF.	G = ± 2% (≥ 10pF) J = ± 5% (≥ 10pF) K = ± 10% (≥ 10pF)	X = Nickel barrier with 100% tin plated finish F = Palladium silver	C = 200V E = 500V G = 1000V H = 3000V	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

*See page 57 for cassette case packaged capacitors.



High Voltage C0G (NPO) Dielectric

Vishay Vitramon

NPO DIELECTRIC - HIGH VOLTAGE																								
STYLE		VJ0603		VJ0805		VJ1206		VJ1210		VJ1808			VJ1812*				VJ1825*		VJ2220*				VJ2225*	
E.I.A. TYPE		0603		0805		1206		1210		—			1812				1825		—				—	
VOLTAGE (Vdc)		200	—	200	500	200	500	200	500	200	500	1000	200	500	1000	3000	200	500	200	500	1000	200	500	
Capacitance Code	Capacitance																							
1R0	1.0pF																							
1R2	1.2pF																							
1R5	1.5pF																							
1R8	1.8pF																							
2R2	2.2pF																							
2R7	2.7pF																							
3R3	3.3pF																							
3R9	3.9pF																							
4R7	4.7pF																							
5R6	5.6pF																							
6R8	6.8pF																							
8R2	8.2pF																							
100	10pF																							
120	12pF																							
150	15pF																							
180	18pF																							
220	22pF																							
270	27pF																							
330	33pF																							
390	39pF																							
470	47pF																							
560	56pF																							
680	68pF																							
820	82pF																							
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																							

*See page 61 for soldering recommendations.

NPO DIELECTRIC - HIGH VOLTAGE - TYPICAL PARAMETERS

