



Multilayer Ceramic Chip Capacitors



FEATURES

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



GENERAL SPECIFICATIONS

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

Capacitance Range: 330 pF to 1.8 μ F.

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

Dissipation Factor (DF):
2.5 % maximum at 1.0 Vrms and 1 kHz .

Aging Rate:
1 % maximum per decade.

Insulation Resistance (IR):

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

At + 125 °C and rated voltage 10,000 M Ω minimum or 100 Ω 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

≤ 200 V DC : DWV at 250 % rated voltage

500 V DC : DWV at 200 % rated voltage

1000 V DC : DWV at 150 % rated voltage.

ORDERING INFORMATION

VJ1812	Y	472	K	X	E	A	T	### ³⁾
CASE CODE	DIELECTRIC	CAPACITANCE NOMINAL CODE	CAPACITANCE TOLERANCE	TERMINATION	DC VOLTAGE RATING ¹⁾	MARKING	PACKAGING	PROCESS CODE
0603 0805 1206 1210 1808 1812 1825 2220 2225 3640	Y = X7R	Expressed in picofarads (pF). The first two digits are significant, the third is a multiplier. Examples: 472 = 4700 pF	J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	X = Ni barrier 100% tinplated F = AgPd	C = 200V E = 500V G = 1000V	A = Unmarked M = Marked		
							T = 7" reel / plastic tape C = 7" reel / paper tape R = 11 1/4" reel / plastic tape P = 11 1/4" reel / paper tape I = 7" reel / flamed paper tape O = 11 1/4" reel / flamed paper tape NOTE: "I" and "O" is used for "F" termination	

Note

1. DC voltage rating should not be exceeded in application

3. Process Code may be added with up to three digits, used to control non-standard products and/or special requirements

X7R DIELECTRIC - HIGH VOLTAGE																										
STYLE		VJ0603		VJ0805		VJ1206		VJ1210 ¹⁾		VJ1808 ¹⁾			VJ1812 ¹⁾			VJ1825 ¹⁾			VJ2220 ¹⁾			VJ2225 ¹⁾			VJ3640 ¹⁾	
EIA 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	CAP.																									
121	120 pF																									
151	150 pF																									
181	180 pF																									
221	220 pF																									
271	270 pF																									
331	330 pF																									
391	390 pF																									
471	470 pF																									
561	560 pF																									
681	680 pF																									
821	820 pF																									
102	1000 pF																									
122	1200 pF																									
152	1500 pF																									
182	1800 pF																									
222	2200 pF																									
272	2700 pF																									
332	3300 pF																									
392	3900 pF																									
472	4700 pF																									
562	5600 pF																									
682	6800 pF																									
822	8200 pF																									
103	0.010 µF																									
123	0.012 µF																									
153	0.015 µF																									
183	0.018 µF																									
223	0.022 µF																									
273	0.027 µF																									
333	0.033 µF																									
393	0.039 µF																									
473	0.047 µF																									
563	0.056 µF																									
683	0.068 µF																									
823	0.082 µF																									
104	0.10 µF																									
124	0.12 µF																									
154	0.15 µF																									
184	0.18 µF																									
224	0.22 µF																									
274	0.27 µF																									
334	0.33 µF																									
394	0.39 µF																									
474	0.47 µF																									
564	0.56 µF																									
684	0.68 µF																									
824	0.82 µF																									
105	1.0 µF																									
125	1.2 µF																									
155	1.5 µF																									
185	1.8 µF																									

Note

¹ See page for soldering recommendations, or visit www.vishay.com/doc?45034



X7R DIELECTRIC - HIGH VOLTAGE - TYPICAL PARAMETERS

