

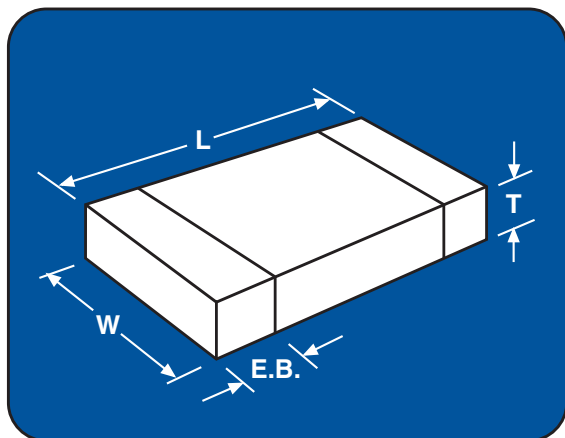
X7R High Voltage Ceramic Chip Capacitors

500VDC - 10000VDC



General Specifications X7R

Capacitance Range	56pf-2.2µF(+25° C, 1.0Vrms, 1KHz) +/-
Capacitance Tolerance	5,10,20%, +80/-20%
Temperature Coefficient	+/- 15%, from -55° C to 125° C 2.5% max.
Dissipation Factor	(+25° C, 1.0Vrms, 1KHz)
Voltage Ratings	500 Vdc to 10000 Vdc
Dielectric Withstanding Voltage	1.2x rated voltage (100mA max.)
Insulation Resistance (min.)	100K megohms or 1K megohms-mfd at 25° C, whichever is less 10000 megohms or 100 megohms-mfd at 125° C, whichever is less
Termination Type	Palladium Silver (100% Silver available upon request)



Style and Size Information (All dimensions are in inches)

STYLE	LENGTH(L)	WIDTH(W)	MAX THICKNESS(T)	ELECTRODE BAND (E.B.) MAX.
1515	.150+/- .015	.150+/- .015	.100	.025
1808	.180+/- .015	.080+/- .010	.070	.025
1812	.180+/- .015	.120+/- .015	.110	.025
1825	.180+/- .015	.250+/- .020	.150	.025
2020	.200+/- .020	.200+/- .020	.150	.025
2225	.220+/- .020	.250+/- .020	.180	.025
2520	.250+/- .020	.200+/- .020	.180	.025
3530	.350+/- .030	.300+/- .030	.200	.030
4040	.400+/- .030	.400+/- .030	.200	.030
4540	.450+/- .030	.400+/- .030	.200	.030
5550	.550+/- .030	.500+/- .030	.200	.030
6560	.650+/- .030	.600+/- .030	.200	.030
8580	.850+/- .030	.800+/- .030	.200	.030
11050	1.100+/- .030	.500+/- .030	.200	.030
13060	1.300+/- .030	.600+/- .030	.200	.030

X7R MAXIMUM CAPACITANCE

STYLE	MIN	500V MAX	1000V MAX	2000V MAX	3000V MAX	4000V MAX	5000V MAX	10000V MAX
1515	100 pf	.039 µF	.01 µF	1800 pf				
1808	56 pf	.022 µF	.3900 pf	1500 pf				
1812	100 pf	.056 µF	.01 µF	2700 pf				
1825	100 pf	.12 µF	.039 µF	.01 µF				
2020	100 pf	.1 µF	.033 µF	8200 pf	3300 pf			
2225	100 pf	.27 µF	.082 µF	.015 µF	4700 pf			
2520	100 pf	.12 µF	.047 µF	.012 µF	4700 pf			
3530	100 pf	.56 µF	.15 µF	.033 µF	.015 µF	6800 pf		
4040	100 pf	.82 µF	.22 µF	.068 µF	.018 µF	.01 µF		
4540	100 pf	1.0 µF	.27 µF	.068 µF	.027 µF	.01 µF	6800 pf	
5550	560 pf	1.5 µF	.47 µF	.1 µF	.039 µF	.018 µF	.012 µF	
6560	1000 pf	2.2 µF	.68 µF	.18 µF	.068 µF	.027 µF	.018 µF	
8580	1000 pf		1.0 µF	.27 µF	.1 µF	.056 µF	.022 µF	
11050	1000 pf			.22 µF	.082 µF	.047 µF	.022 µF	6800 pf
13060	1500 pf			.33 µF	.12 µF	.068 µF	.039 µF	.01 µF

HowToOrder

(Custom sizes and values available, contact factory)

202	C	4540	B	103	K
Voltage	Configuration	Style	Dielectric Type	Capacitance Value	Tolerance
501 = 500	C = Chip		B = X7R	Capacitance In Picofarads	J = ± 5%
102 = 1000				Last Digit is the Number of Zeros	K = ± 10%
202 = 2000				ie, 103 = 10,000 pf	M = ± 20%
302 = 3000					Z = + 80/- 20%
402 = 4000					P = GMV
502 = 5000					
103 = 10,000					

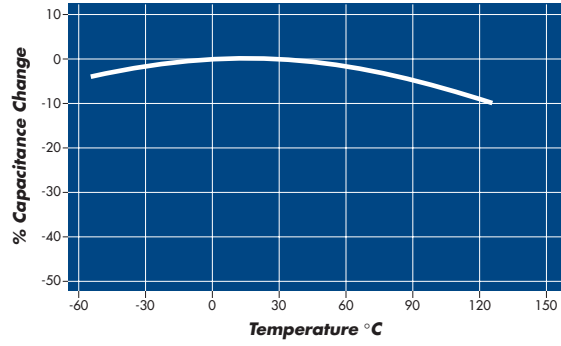
CIRCUIT FUNCTIONS, Inc.

2282 Mouton Drive • Carson City, Nevada 89706 • (775) 885-8003 • Fax (775) 885-9943

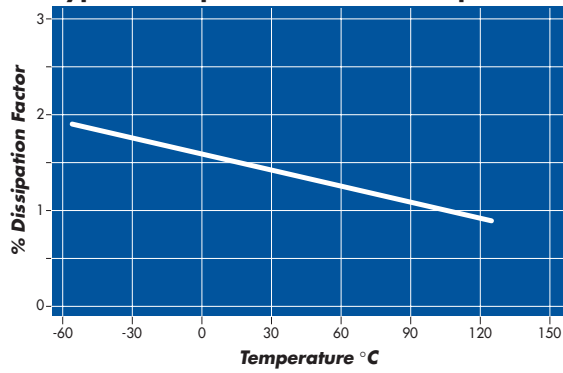
www.circuitfunctions.com

Data Sheet Rev A

Temperature Coefficient of Capacitance



Typical Dissipation Factor vs. Temperature



Minimum Insulation Resistance vs. Temperature and Capacitance

