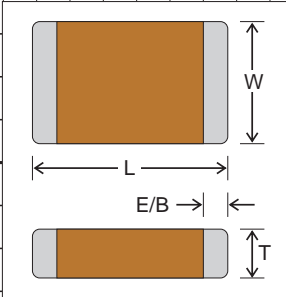




Capacitance (µF)	682	822	103	123	153	183	223	273	333	393	473	563	683	823	104	124	154	184	224	274	334	394	474	564	684	824	105	125	155	185	225	275	335	395	475	106		
6800 pF																																						
8200 pF																																						
.010 µF																																						
.012 µF																																						
.015 µF																																						
.018 µF																																						
.022 µF																																						
.027 µF																																						
.033 µF																																						
.039 µF																																						
.047 µF																																						
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1.00 µF																																						
1.20 µF																																						
1.50 µF																																						
1.80 µF																																						
2.20 µF																																						
2.70 µF																																						
3.30 µF																																						
3.90 µF																																						
4.70 µF																																						
10.0 µF																																						

**VOLTAGE CODE**

- 200 Volt
- 100 Volt
- 50 Volt
- 25 Volt
- 16 Volt
- 10 Volt



NPO	<b>R07 / 0402</b>	L .040 ± .004"
X7R		W .020 ± .004"
Z5U		T .025" Max
Y5V		E/B .010" Typ.
NPO	<b>R14 / 0603</b>	L .063 ± .010"
X7R		W .032 ± .010"
Z5U		T .035" Max
Y5V		E/B .015" Typ.
NPO	<b>R15 / 0805</b>	L .080 ± .010"
NPO		W .050 ± .010"
X7R		T .051" Max
X7R		E/B .020" Typ.
X5R		
Z5U		
Y5V		
NPO	<b>R18 / 1206</b>	L .125 ± .010"
NPO		W .062 ± .010"
X7R		T .070" Max
X7R		E/B .020" Typ.
X5R		
Z5U		
Y5V		
NPO	<b>S41 / 1210</b>	L .125 ± .010"
NPO		W .095 ± .010"
X7R		T .070" Max
X7R		E/B .020" Typ.
Z5U		
Y5V		
NPO	<b>S43 / 1812</b>	L .175 ± .010"
X7R		W .125 ± .010"
Z5U		T .085" Max
Y5V		E/B .020" Typ.

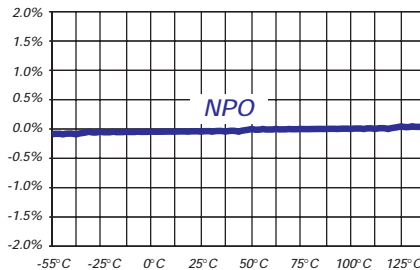
For other size/voltage/capacitance combinations please contact the factory

## CERAMIC DIELECTRIC CHARACTERISTICS

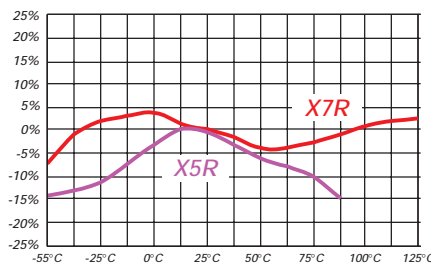
SPECIFICATION	NPO	X7R	X5R	Z5U	Y5V - Tanceram®
Temperature Coefficient:	0 ± 30 ppm/°C	± 15%	± 15%	+ 22% - 56%	+ 22% - 82%
Temperature Range:	-55 to +125°C	-55 to +125°C	-55 to +85°C	+10 to +85°C	-30 to 85°C
Dissipation Factor, Max.:	All Rated Voltages: 0.1%	For ≥ 50 WVDC: 2.5% For 25 WVDC: 3.0% For 16 WVDC: 3.5%	For ≥ 25 WVDC: 3.0% For 16 WVDC: 3.5% For 10 WVDC: 5.0%	For ≥ 25 WVDC: 4.0% For 16 WVDC: 5.0%	For ≥ 25 WVDC: 5.0% For 16 WVDC: 7.0% For 10 WVDC: 9.0%
Ageing, Typical per decade hr:	None	2.5%	2.5%	5.0%	7.0%
Insulation Resistance, Min. (1):	1000ΩF or 100 GΩ	1000ΩF or 100 GΩ	1000ΩF or 100GΩ	100ΩF or 10 GΩ	100 ΩF or 10 GΩ
Dielectric Strength, Min. (2):	2.5 X WVDC	2.5 X WVDC	2.5 X WVDC	2.5 X WVDC	2.5 X WVDC

Test Notes: 25°C, WVDC., Test Freq. = 1Khz ±50Hz, 1.0±0.2 VRMS, (1Mhz ±50KHz, 1.0±0.2 VRMS For NPO Values ≤ 100 pF), (1) whichever less, (2) 50 mA Max

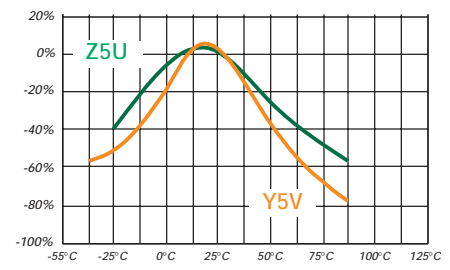
Typical Capacitance Change vs Temperature



Typical Capacitance Change vs Temperature



Typical Capacitance Change vs Temperature



## HOW TO ORDER

500	R15	N	101	J	V	4	E
<b>VOLTAGE</b>	<b>CASE SIZE</b>	<b>DIELECTRIC</b>	<b>CAPACITANCE</b>	<b>TOLERANCE</b>	<b>TERMINATION</b>	<b>MARKING</b>	<b>TAPE MODIFIER</b>
100 = 10 V 160 = 16 V 250 = 25 V 500 = 50 V 101 = 100 V 201 = 200 V 251 = 250 V 501 = 500 V 102 = 1000 V 202 = 2000 V 302 = 3000 V	R07=0402 R14=0603 R15=0805 R18=1206 S41=1210 R29=1808 S43=1812 S49=1825 S48=2225	N = NPO W = X7R X = X5R Z = Z5U Y = Y5V	1st two digits are significant; third digit denotes number of zeros, R = decimal. 1R0 = 1.0 pF 100 = 10 pF 102 = 1,000 pF 474 = 0.47 μF	* B = ± 0.10 pF * C = ± 0.25 pF * D = ± 0.50 pF F = ± 1 % G = ± 2 % J = ± 5 % K = ± 10 % M = ± 20 % Z = +80 -20 % *Values < 10 pF only	V = Nickel Barrier	4 = Unmarked 6 = EIA "J" Code* *Not available on 0402 & 0603 sizes	Tape Tape Reel Code Type Size U Embossed 13" R Punched 7" E Embossed 7" T Punched 7" Z Embossed 5" Y Punched 5"  Tape specifications conform to EIA RS481

Part number written: 500R15N101JV4E