

HIGH VOLTAGE SURFACE MOUNT MLCCs 250 - 5,000 VDC



These high voltage capacitors feature a special internal electrode design which reduces voltage concentrations by distributing voltage gradients throughout the entire capacitor. This unique design also affords increased capacitance values in a given case size and voltage rating. The capacitors are designed and manufactured to the general requirement of EIA198 and are subjected to a 100% electrical testing making them well suited for a wide variety of telecommunication, commercial, and industrial applications.





APPLICATIONS

- Analog & Digital Modems
- Lighting Ballast Circuits
- DC-DC Converters
- LAN/WAN Interface
- Voltage Multipliers
- Back-lighting Inverters

NOW AVAILABLE with Polyterm® soft termination option for demanding environments & processes. Visit our website for full details.

Mechanical Characteristics

Available Capacitance

			Rated Voltage	NPO Dielectric		X7R Dielectric	
				Minimum	Maximum	Minimum	Maximum
R15/0805 		Inches (mm)	250 VDC	-	-	1000 pF	0.022 µF
	L	.080 ±.010 (2.03 ±.25)	500 VDC	10 pF	680 pF	1000 pF	0.010 µF
	W	.050 ±.010 (1.27 ±.25)	630 VDC	10 pF	560 pF	1000 pF	3900 pF
	T	.055 Max. (1.40)	1000 VDC	10 pF	390 pF	100 pF	2700 pF
	E/B	.020 ±.010 (0.51±.25)					
R18/1206 		Inches (mm)	250 VDC	-	-	1000 pF	0.068 µF
	L	.125 ±.010 (3.17 ±.25)	500 VDC	10 pF	1500 pF	1000 pF	0.027 µF
	W	.062 ±.010 (1.57 ±.25)	630 VDC	10 pF	1200 pF	1000 pF	0.010 µF
	T	.067 Max. (1.70)	1000 VDC	10 pF	1000 pF	100 pF	5600 pF
	E/B	.020 ±.010 (0.51±.25)	2000 VDC	10 pF	220 pF	100 pF	1000 pF
			3000 VDC	10 pF	82 pF	100 pF	220 pF
S41/1210 		Inches (mm)	250 VDC	-	-	1000 pF	0.120 µF
	L	.125 ±.010 (3.18 ±.25)	500 VDC	10 pF	3900 pF	1000 pF	0.047 µF
	W	.095 ±.010 (2.41 ±.25)	630 VDC	10 pF	2700 pF	1000 pF	0.027 µF
	T	.080 Max. (2.03)	1000 VDC	10 pF	1800 pF	100 pF	0.010 µF
	E/B	.020 ±.010 (0.51±.25)	2000 VDC	10 pF	560 pF	100 pF	2200 pF
			3000 VDC	10 pF	220 pF	100 pF	560 pF
R29/1808 		Inches (mm)	500 VDC	10 pF	4700 pF	1000 pF	0.056 µF
	L	.189 ±.010 (4.80 ±.25)	630 VDC	10 pF	3300 pF	1000 pF	0.039 µF
	W	.080 ±.010 (2.03 ±.25)	1000 VDC	1.0 pF	2200 pF	100 pF	0.018 µF
	T	.085 Max. (2.16)	2000 VDC	1.0 pF	820 pF	100 pF	6800 pF
	E/B	.020 ±.010 (0.51±.25)	3000 VDC	1.0 pF	470 pF	100 pF	3300 pF
			4000 VDC	1.0 pF	180 pF	100 pF	270 pF
			5000 VDC	1.0 pF	75 pF	100 pF	120 pF

Available capacitance values include the following significant retma values and their multiples:





1.0 1.2 1.5 1.8 2.2 2.7 3.3 3.9 4.7 5.6 6.8 8.2 (1.0 = 1.0, 10, 100, 1000, etc.)

Consult factory for non-retma values and sizes or voltages not shown.

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Available Capacitance

			Rated Voltage	NPO Dielectric		X7R Dielectric	
				Minimum	Maximum	Minimum	Maximum
S43 / 1812		Inches (mm)	250 VDC	-	-	0.010 µF	0.220 µF
			500 VDC	100 pF	8200 pF	1000 pF	0.150 µF
			630 VDC	100 pF	6800 pF	1000 pF	0.100 µF
			1000 VDC	10 pF	5600 pF	1000 pF	0.022 µF
			2000 VDC	10 pF	1800 pF	100 pF	6800 pF
			3000 VDC	10 pF	1000 pF	100 pF	4700 pF
			4000 VDC	10 pF	390 pF	10 pF	1500 pF
			5000 VDC	10 pF	150 pF	10 pF	680 pF
S49 / 1825		Inches (mm)	500 VDC	100 pF	0.018 µF	0.01 µF	0.330 µF
			630 VDC	100 pF	0.015 µF	0.01 µF	0.220 µF
			1000 VDC	10 pF	0.012 µF	1000 pF	0.039 µF
			2000 VDC	10 pF	5600 pF	100 pF	0.018 µF
			3000 VDC	10 pF	2200 pF	100 pF	8200 pF
			4000 VDC	10 pF	1200 pF	100 pF	2000 pF
			5000 VDC	10 pF	390 pF	100 pF	820 pF
S47 / 2220		Inches (mm)	500 VDC	1000 pF	0.018 µF	0.01 µF	0.330 µF
			630 VDC	1000 pF	0.018 µF	0.01 µF	0.270 µF
			1000 VDC	100 pF	0.015 µF	1000 pF	0.056 µF
			2000 VDC	100 pF	5600 pF	1000 pF	0.027 µF
			3000 VDC	10 pF	2700 pF	100 pF	0.010 µF
			4000 VDC	10 pF	1500 pF	100 pF	2200 pF
			5000 VDC	10 pF	470 pF	100 pF	1500 pF
S48 / 2225		Inches (mm)	500 VDC	1000 pF	0.027 µF	0.01 µF	0.470 µF
			630 VDC	1000 pF	0.022 µF	0.01 µF	0.330 µF
			1000 VDC	100 pF	0.018 µF	1000 pF	0.120 µF
			2000 VDC	100 pF	8200 pF	1000 pF	0.039 µF
			3000 VDC	10 pF	3300 pF	100 pF	0.015 µF
			4000 VDC	10 pF	1800 pF	100 pF	5600 pF
			5000 VDC	10 pF	680 pF	100 pF	1500 pF

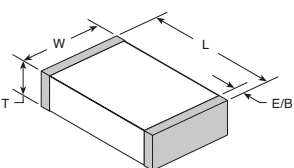
Available capacitance values include the following significant retma values and their multiples: 1.0 1.2 1.5 1.8 2.2 2.7 3.3 3.9 4.7 5.6 6.8 8.2 (1.0 = 1.0, 10, 100, 1000, etc.) Consult factory for non-retma values and sizes or voltages not shown.

ELECTRICAL CHARACTERISTICS

Meets the standard NPO & X7R dielectric specifications listed on page 20

Dielectric Withstanding Voltage DWV = 1.5 X rated WVDC for ratings ≤ 500 WVDC,
DWV = 1.2 X rated WVDC for ratings ≥ 1,000 WVDC

NOTE: Capacitors may require a surface coating to prevent external arcing.



HOW TO ORDER

202	R29	N	101	K	V	4	E
VOLTAGE 501 = 500 V 631 = 630 V 102 = 1000 V 202 = 2000 V 302 = 3000 V 402 = 4000 V 502 = 5000 V	CASE SIZE See Chart DIELECTRIC N = NPO/COG W = X7R		CAPACITANCE 1st two digits are significant; third digit denotes number of zeros, R = decimal. 1R0 = 1.0 pF 101 = 100 pF	TOLERANCE NPO: J = ± 5% K = ± 10% X7R: K = ± 10% M = ± 20%	TERMINATION V = Ni barrier w/ 100% Sn Plating F = Polyterm flexible termination	MARKING 4 = Unmarked 6 = EIA Code*	TAPE MODIFIER Code Tape Reel E Embossed 7" U Embossed 13" T Paper 7" R Paper 13" Tape specs. per EIA RS481

Part number written:

202R29N101KV4E



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