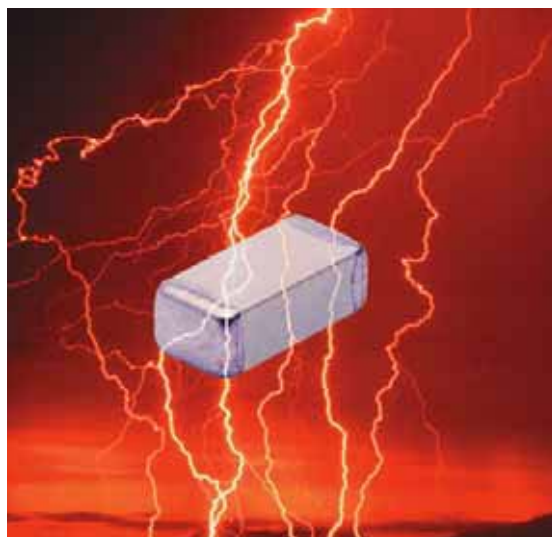




THE DATASHEET OF 501R15W103KV4E



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

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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	3300 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	0.047 μF
	W	.062 ±.010	(1.57 ±.25)	630 VDC	10 pF	1200 pF	1000 pF	0.027 μF
	T	.067 Max.	(1.70)	1000 VDC	10 pF	1000 pF	100 pF	0.018 μF
	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	0.082 μF
	W	.095 ±.010	(2.41 ±.25)	630 VDC	10 pF	2700 pF	1000 pF	0.056 μF
	T	.080 Max.	(2.03)	1000 VDC	10 pF	1800 pF	100 pF	0.027 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	.185 ±.015	(4.80 ±.25)	630 VDC	10 pF	3300 pF	1000 pF	0.047 μF
	W	.080 ±.010	(2.03 ±.25)	1000 VDC	1.0 pF	2200 pF	100 pF	0.033 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	47 pF	120 pF
				6000 VDC	1.0 pF	75 pF	47 pF	100 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.

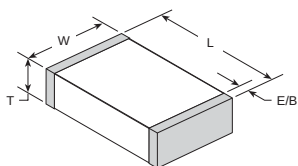
High Voltage Surface Mount MLCCs 250 - 6,000 VDC

Mechanical Characteristics

Available Capacitance

			Rated Voltage	NPO Dielectric		X7R Dielectric	
				Minimum	Maximum	Minimum	Maximum
S43 / 1812 	Inches	(mm)	250 VDC	-	-	0.010 µF	0.270 µF
	L	.180 ±.010 (4.57 ±.25)	500 VDC	100 pF	8200 pF	1000 pF	0.150 µF
	W	.125 ±.010 (3.17 ±.25)	630 VDC	100 pF	6800 pF	1000 pF	0.100 µF
	T	.110 Max. (2.80)	1000 VDC	10 pF	5600 pF	1000 pF	0.056 µF
	E/B	.025 ±.015 (0.64±.38)	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	100 pF	1500 pF
			5000 VDC	10 pF	150 pF	100 pF	680 pF
			6000 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
	L	.180 ±.010 (4.57 ±.25)	630 VDC	100 pF	0.015 µF	0.01 µF	0.220 µF
	W	.250 ±.010 (6.35 ±.25)	1000 VDC	10 pF	0.012 µF	1000 pF	0.039 µF
	T	.140 Max. (3.56)	2000 VDC	10 pF	5600 pF	100 pF	0.018 µF
	E/B	.025 ±.015 (0.64±.38)	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
			6000 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
	L	.225 ±.015 (5.72 ±.38)	630 VDC	1000 pF	0.018 µF	0.01 µF	0.270 µF
	W	.200 ±.015 (5.08 ±.38)	1000 VDC	100 pF	0.015 µF	1000 pF	0.056 µF
	T	.150 Max. (3.81)	2000 VDC	100 pF	5600 pF	1000 pF	0.027 µF
	E/B	.025 ±.015 (0.64±.38)	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
			6000 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
	L	.225 ±.010 (5.72 ±.25)	630 VDC	1000 pF	0.022 µF	0.01 µF	0.330 µF
	W	.255 ±.015 (6.48 ±.38)	1000 VDC	100 pF	0.018 µF	1000 pF	0.120 µF
	T	.160 Max. (4.06)	2000 VDC	100 pF	8200 pF	1000 pF	0.039 µF
	E/B	.025 ±.015 (0.64±.38)	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	470 pF	100 pF	1500 pF
			6000 VDC	10 pF	470 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. Solder mask should not be used beneath capacitors. For more information see JDI Tech Note "Surface Arc Season"

HOW TO ORDER

Part number written: 202R29N101KV4E

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 602 = 6000 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



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