

High Voltage Surface Mount MLCCs 250 - 6,000 VDC

CASE SIZE

CAPACITANCE SELECTION

JDI / EIA	INCHES	(MM)	RATED VOLTAGE	NP0 DIELECTRIC		X7R DIELECTRIC	
				MINIMUM	MAXIMUM	MINIMUM	MAXIMUM
S43 / 1812 	L W T E/B	.177 ±.012 (4.50 ±.30) .125 ±.010 (3.18 ±.25) .110 Max. (2.80) .025 ±.015 (0.64±.38)	250 VDC	-	-	0.010 µF	0.470 µF
			500 VDC	100 pF	8200 pF	1000 pF	0.330 µF
			630 VDC	100 pF	6800 pF	1000 pF	0.120 µF
			1000 VDC	10 pF	5600 pF	1000 pF	0.100 µF
			2000 VDC	10 pF	1800 pF	100 pF	0.010 µF
			3000 VDC	10 pF	1000 pF	100 pF	4700 pF
			4000 VDC	10 pF	390 pF	100 pF	1200 pF
			5000 VDC	10 pF	150 pF	100 pF	820 pF
			6000 VDC	10 pF	150 pF	10 pF	330 pF
S49 / 1825 	L W T E/B	.180 ±.010 (4.57 ±.25) .250 ±.010 (6.35 ±.25) .140 Max. (3.56) .025 ±.015 (0.64±.38)	500 VDC	100 pF	0.018 µF	0.01 µF	0.390 µF
			630 VDC	100 pF	0.015 µF	0.01 µF	0.270 µF
			1000 VDC	10 pF	0.012 µF	1000 pF	0.180 µF
			2000 VDC	10 pF	5600 pF	100 pF	0.039 µF
			3000 VDC	10 pF	2200 pF	100 pF	8200 pF
			4000 VDC	10 pF	1200 pF	100 pF	2200 pF
			5000 VDC	10 pF	390 pF	100 pF	1500 pF
			6000 VDC	10 pF	390 pF	100 pF	820 pF
S47 / 2220 	L W T E/B	.225 ±.015 (5.72 ±.38) .200 ±.015 (5.08 ±.38) .150 Max. (3.81) .025 ±.015 (0.64±.38)	500 VDC	1000 pF	0.018 µF	0.01 µF	0.470 µF
			630 VDC	1000 pF	0.018 µF	0.01 µF	0.270 µF
			1000 VDC	100 pF	0.015 µF	1000 pF	0.120 µF
			2000 VDC	100 pF	5600 pF	1000 pF	0.039 µF
			3000 VDC	10 pF	2700 pF	100 pF	0.010 µF
			4000 VDC	10 pF	1500 pF	100 pF	2700 pF
			5000 VDC	10 pF	470 pF	100 pF	1500 pF
			6000 VDC	10 pF	470 pF	100 pF	820 pF
S48 / 2225 	L W T E/B	.225 ±.010 (5.72 ±.25) .255 ±.015 (6.48 ±.38) .160 Max. (4.06) .025 ±.015 (0.64±.38)	500 VDC	1000 pF	0.027 µF	0.01 µF	0.560 µF
			630 VDC	1000 pF	0.022 µF	0.01 µF	0.390 µF
			1000 VDC	100 pF	0.018 µF	1000 pF	0.180 µF
			2000 VDC	100 pF	8200 pF	1000 pF	0.056 µF
			3000 VDC	10 pF	3300 pF	100 pF	0.012 µF
			4000 VDC	10 pF	1800 pF	100 pF	3300 pF
			5000 VDC	10 pF	470 pF	100 pF	2700 pF
			6000 VDC	10 pF	470 pF	100 pF	1200 pF

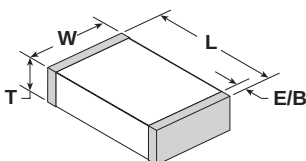
Available cap. values include these significant retma values and their multiples: 1.0 1.2 1.5 1.8 2.2 2.7 3.3 3.9 4.7 5.6 6.8 8.2
(1.0 = 1.0, 10, 100, 1000, etc.) Consult factory for non-retma values and sizes or voltages not shown.

ELECTRICAL CHARACTERISTICS

Meets the standard NP0 & X7R dielectric specifications listed on page 78

DIELECTRIC WITHSTANDING VOLTAGE DWV = 1.5 X rated WVDC for ratings 500-999 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 HIGH VOLTAGE SURFACE MOUNT

P/N written: 202R18W102KV4E

202	R18	W	102	K	V	4	E
VOLTAGE	SIZE	DIELECTRIC	CAPACITANCE	TOLERANCE	TERMINATION	MARKING	PACKING
501 = 500 V 631 = 630 V 102 = 1000 V 202 = 2000 V 302 = 3000 V 402 = 4000 V 502 = 5000 V 602 = 6000 V	R15 = 0805 R18 = 1206 R29 = 1808 S41 = 1210 S43 = 1812 S47 = 2220 S48 = 2225 S49 = 1825	N = NP0 W = X7R	1st two digits are significant; third digit denotes number of zeros. 102 = 1000 pF 104 = 0.10 µF	J = ± 5% K = ± 10% M = ± 20%	V = Ni Barrier with 100% Sn Plating (Matte) F = Polyterm flexible termination T = SnPb	4 = Unmarked 6 = EIA Code	E = Embossed 7" T = Punched 7" No code = bulk Tape specs. per EIA RS481



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