

High Voltage MLC Leaded Chips

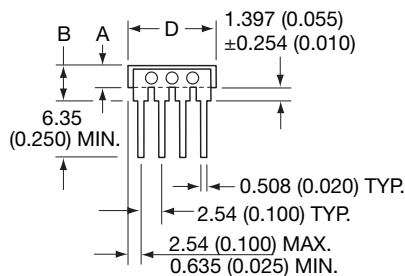
For 600V to 5000V Applications

HOW TO ORDER

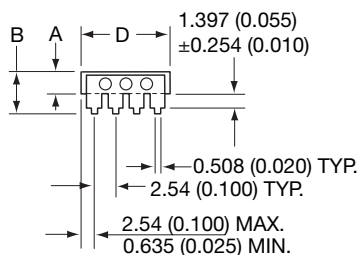
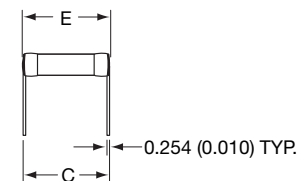
1825	A	A	271	K	A	V	00N
AVX Style	Voltage	Temperature Coefficient	Capacitance Code	Capacitance Tolerance	Test Level	Finish	Lead Style
1825	600V/630V = C	C0G = A	(2 significant digits + no. of zeros)	C0G: J = $\pm 5\%$	A = Standard	V = Uncoated	00N = Straight Lead
2225	1000V = A	X7R = C	Examples:	K = $\pm 10\%$		W = Epoxy Coated	00J = Leads Formed In
3640	1500V = S		10 pF = 100	M = $\pm 20\%$			00L = Leads Formed Out
	2000V = G		100 pF = 101	X7R: K = $\pm 10\%$			
	2500V = W		1,000 pF = 102	M = $\pm 20\%$			
	3000V = H		22,000 pF = 223	Z = +80%, -20%			
	4000V = J		220,000 pF = 224				
	5000V = K						

Note: Capacitors with X7R dielectrics are not intended for applications across AC supply mains or AC line filtering with polarity reversal. Contact plant for recommendations. Capacitors may require protective surface coating to prevent external arcing.

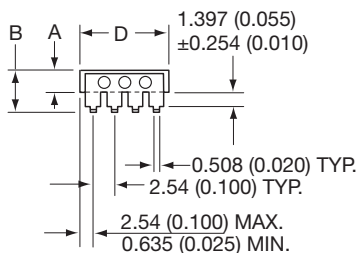
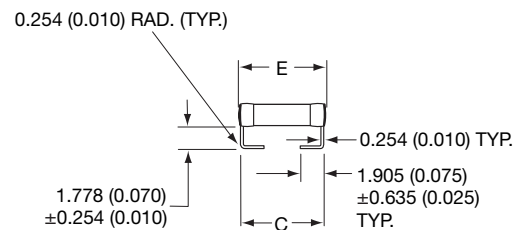
Not RoHS Compliant



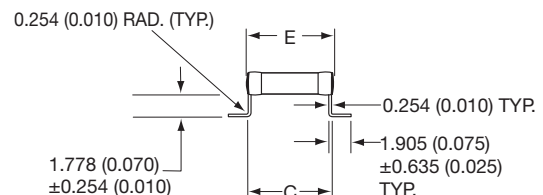
“N” STYLE LEADS



“J” STYLE LEADS



“L” STYLE LEADS



DIMENSIONS

millimeters (inches)

Style	A (max.)	B (max.)	C ± 0.635 (± 0.025)	D ± 0.635 (± 0.025)	E (max.)	No. of Leads per side
1825	2.54 (0.100)	For “N” Style Leads, “B” Dimension = 4.19 (0.165) For “J” & “L” Leads, “B” Dimension = 4.58 (0.180)	5.08 (0.200)	6.35 (0.250)	6.86 (0.270)	3
2225			6.35 (0.250)	6.35 (0.250)	7.62 (0.300)	3
3640			10.2 (0.400)	10.2 (0.400)	11.2 (0.440)	4

Note: For W (Epoxy Coated) part add 0.127 (0.005) to max. and nominal dimensions A, B, D, & E



Performance of SMPS capacitors can be simulated by downloading SpiCalci software program -
<http://www.avx.com/SpiApps/default.asp#spicalci>
 Custom values, ratings and configurations are also available.



High Voltage MLC Leaded Chips

For 600V to 5000V Applications

C0G Dielectric

Performance Characteristics

Capacitance Range	10 pF to 0.047 μ F (25°C, 1.0 $\pm$ 0.2 Vrms at 1kHz, for $\leq$ 1000 pF use 1 MHz)
Capacitance Tolerances	$\pm$ 5%, $\pm$ 10%, $\pm$ 20%
Dissipation Factor	0.15% max. (+25°C, 1.0 $\pm$ 0.2 Vrms, 1kHz, for $\leq$ 1000 pF use 1 MHz)
Operating Temperature Range	-55°C to +125°C
Temperature Characteristic	0 $\pm$ 30 ppm/°C (0 VDC)
Voltage Ratings	600, 630, 1000, 1500, 2000, 2500, 3000, 4000 & 5000 VDC (+125°C)
Insulation Resistance (+25°C, at 500 VDC)	100K M Ω min. or 1000 M Ω - μ F min., whichever is less
Insulation Resistance (+125°C, at 500 VDC)	10K M Ω min. or 100 M Ω - μ F min., whichever is less
Dielectric Strength	Minimum 120% rated voltage for 5 seconds at 50 mA max. current

HIGH VOLTAGE C0G CAPACITANCE VALUES

VOLTAGE	1825	2225	3640
600/630 min. max.	1000 pF 0.012 μ F	1000 pF 0.018 μ F	1000 pF 0.047 μ F
1000 min. max.	100 pF 8200 pF	1000 pF 0.010 μ F	1000 pF 0.022 μ F
1500 min. max.	100 pF 4700 pF	100 pF 5600 pF	100 pF 0.010 μ F
2000 min. max.	100 pF 1800 pF	100 pF 2700 pF	100 pF 6800 pF
2500 min. max.	10 pF 1200 pF	100 pF 1800 pF	100 pF 3900 pF
3000 min. max.	10 pF 8200 pF	10 pF 1200 pF	100 pF 2700 pF
4000 min. max.	10 pF 330 pF	10 pF 560 pF	100 pF 1200 pF
5000 min. max.	— —	10 pF 270 pF	10 pF 820 pF

X7R Dielectric

Performance Characteristics

Capacitance Range	100 pF to 0.56 μ F (25°C, 1.0 $\pm$ 0.2 Vrms at 1kHz)
Capacitance Tolerances	$\pm$ 10%; $\pm$ 20%; +80%, -20%
Dissipation Factor	2.5% max. (+25°C, 1.0 $\pm$ 0.2 Vrms, 1kHz)
Operating Temperature Range	-55°C to +125°C
Temperature Characteristic	$\pm$ 15% (0 VDC)
Voltage Ratings	600, 630, 1000, 1500, 2000, 2500, 3000, 4000 & 5000 VDC (+125°C)
Insulation Resistance (+25°C, at 500 VDC)	100K M Ω min. or 1000 M Ω - μ F min., whichever is less
Insulation Resistance (+125°C, at 500 VDC)	10K M Ω min. or 100 M Ω - μ F min., whichever is less
Dielectric Strength	Minimum 120% rated voltage for 5 seconds at 50 mA max. current

HIGH VOLTAGE X7R MAXIMUM CAPACITANCE VALUES

VOLTAGE	1825	2225	3640
600/630 min. max.	0.010 μ F 0.270 μ F	0.010 μ F 0.330 μ F	0.010 μ F 0.560 μ F
1000 min. max.	1000 pF 0.100 μ F	1000 pF 0.150 μ F	1000 pF 0.220 μ F
1500 min. max.	1000 pF 0.056 μ F	1000 pF 0.068 μ F	1000 pF 0.100 μ F
2000 min. max.	100 pF 0.022 μ F	1000 pF 0.033 μ F	1000 pF 0.027 μ F
2500 min. max.	100 pF 0.015 μ F	100 pF 0.022 μ F	1000 pF 0.022 μ F
3000 min. max.	100 pF 0.010 μ F	100 pF 0.015 μ F	1000 pF 0.018 μ F
4000 min. max.	— —	— —	100 pF 6800 pF
5000 min. max.	— —	— —	100 pF 3300 pF

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Kyocera AVX:

[3640AC224KAV00N](#) [3640CC564KAV00J](#) [2225CC224KAV00J](#) [1825CC683KAV00J](#) [3640CC564KAV00L](#)
[2225CC224KAW00J](#) [2225CC334KAW00L](#) [2225CC204KAV00J](#) [2225CC334KAW00L-TR](#) [2225CC224KAV00L](#)
[2225CC104MAV00R-TR](#) [2225CC334KAV00L](#) [2225CC474MAV00JSPEC](#) [2225CC334KAV00J](#) [2225CC104KAV00J](#)
[H314931-1 R-](#)