

High Voltage MLC Ledged Chips

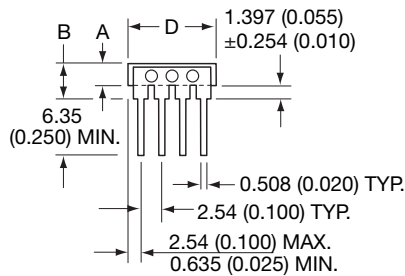
For 600V to 5000V Applications

HOW TO ORDER

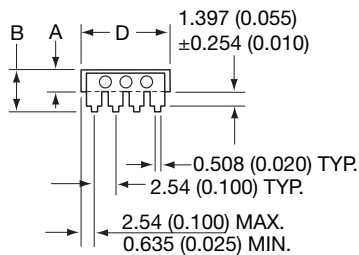
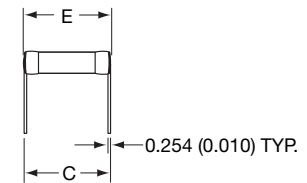
1825	A	A	271	K	A	V	00N
AVX Style	Voltage	Temperature Coefficient	Capacitance Code (2 significant digits + no. of zeros) Examples: 10 pF = 100 100 pF = 101 1,000 pF = 102 22,000 pF = 223 220,000 pF = 224	Capacitance Tolerance COG: J = ±5% K = ±10% M = ±20% Z = +80%, -20%	Test Level A = Standard	Finish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

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.

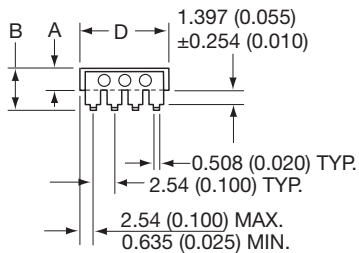
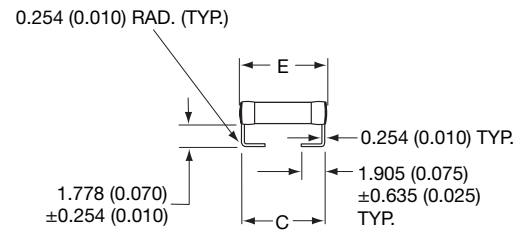
Not RoHS Compliant



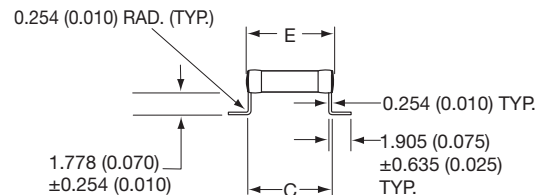
“N” STYLE LEADS



“J” STYLE LEADS



“L” STYLE LEADS



DIMENSIONS

millimeters (inches)

Style	A (max.)	B (max.)	C ±.635 (±0.025)	D ±.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.	1000 pF	1000 pF	1000 pF
600/630 max.	0.012 μ F	0.018 μ F	0.047 μ F
1000 min.	100 pF	1000 pF	1000 pF
1000 max.	8200 pF	0.010 μ F	0.022 μ F
1500 min.	100 pF	100 pF	100 pF
1500 max.	4700 pF	5600 pF	0.010 μ F
2000 min.	100 pF	100 pF	100 pF
2000 max.	1800 pF	2700 pF	6800 pF
2500 min.	10 pF	100 pF	100 pF
2500 max.	1200 pF	1800 pF	3900 pF
3000 min.	10 pF	10 pF	100 pF
3000 max.	8200 pF	1200 pF	2700 pF
4000 min.	10 pF	10 pF	100 pF
4000 max.	330 pF	560 pF	1200 pF
5000 min.	—	10 pF	10 pF
5000 max.	—	270 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.	0.010 μ F	0.010 μ F	0.010 μ F
600/630 max.	0.270 μ F	0.330 μ F	0.560 μ F
1000 min.	1000 pF	1000 pF	0.010 μ F
1000 max.	0.100 μ F	0.150 μ F	0.220 μ F
1500 min.	1000 pF	1000 pF	1000 pF
1500 max.	0.056 μ F	0.068 μ F	0.100 μ F
2000 min.	100 pF	1000 pF	1000 pF
2000 max.	0.022 μ F	0.033 μ F	0.027 μ F
2500 min.	100 pF	100 pF	1000 pF
2500 max.	0.015 μ F	0.022 μ F	0.022 μ F
3000 min.	100 pF	100 pF	1000 pF
3000 max.	0.010 μ F	0.015 μ F	0.018 μ F
4000 min.	—	—	100 pF
4000 max.	—	—	6800 pF
5000 min.	—	—	100 pF
5000 max.	—	—	3300 pF