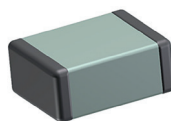


Applications

- Magnetic resonance imaging
- Medical test equipment
- Laboratory analyse system



Electrical Parameters

Manufactured with non magnetic materials

Electrical Characteristics at + 25°C unless otherwise specified

Operating Temperature - 55°C, + 125°C

Temperature Coefficient ± 30ppm

Dissipation Factor < 10.10⁻⁴ at 1Vrms and 1kHz (or 1MHz)

Aging Rate : 1% max per decade

Insulation Resistance (IR)

25°C/Un 10⁵ MOhm or 1000 Ohm-Farad whichever is less
125°C/Un 10⁴ MOhm or 100 Ohm-Farad whichever is less

Dielectric Strength Test

Performed per method 103 of EIA 198-2-E

Applied test voltages :

≤ 100Vdc-rated :	250% of rated voltage
250Vdc-rated :	250% of rated voltage
500Vdc-rated :	min 150% of rated voltage
630Vdc, 1000Vdc-rated :	min 120% of rated voltage

Quick Reference Data

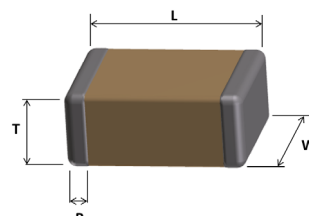
	0402	0603	0805	1206	1210	1812	2220	3640	5550
16V	0.47pF - 470pF	0.47pF - 1.8nF	0.47pF - 5.6nF	0.47pF - 10nF	0.47pF - 18nF				
25V	0.47pF - 390pF	0.47pF - 1.5nF	0.47pF - 4.7nF	0.47pF - 8.2nF	0.47pF - 15nF	0.47pF - 39nF	0.47pF - 82nF		
50V	0.47pF - 330pF	0.47pF - 1.2nF	0.47pF - 3.9nF	0.47pF - 6.8nF	0.47pF - 12nF	0.47pF - 33nF	0.47pF - 68nF		
100V	0.47pF - 220pF	0.47pF - 680pF	0.47pF - 3.3nF	0.47pF - 5.6nF	0.47pF - 10nF	0.47pF - 27nF	0.47pF - 56nF		
500V		0.47pF - 150pF	0.47pF - 680pF	0.47pF - 2.2nF	3.3pF - 6.8nF	8.2pF - 22nF	8.2pF - 39nF	8.2pF - 82nF	
1000V			0.47pF - 180pF	0.47pF - 1nF	3.3pF - 2.2nF	8.2pF - 8.2nF	8.2pF - 12nF	8.2pF - 47nF	
3000V				1pF - 68pF	1pF - 150pF	10pF - 680pF	10pF - 2.2nF	10pF - 8.2nF	
5000V						8.2pF - 470pF	10pF - 680pF	10pF - 820pF	

Ordering Information

0805	Y	220	J	A	P	B	N
SIZE	DIELECTRIC	CAPACITANCE	TOLERANCE	VOLTAGE	TERMINATION	PACKAGING	NON MAGNETIC
0402 0603 0805 1206 1210 1812 2220 3640 5550	A = COG	Expressed in picofarads (pF). The first two digits are significant, the third digit give the number of noughts. Example : 102 = 1000pF	J = ± 5% K = ± 10% M = ± 20%	J = 16V X = 25V A = 50V B = 100V E = 500V G = 1000V I = 3000V L = 5000V	F = Palladium-Silver C = Copper with Tin plated finish W = Silver with Gold plated finish	B = 7" reel V = Bulk	

Dimensions in millimeters

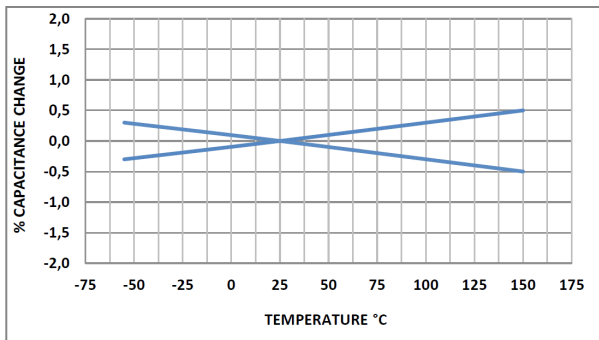
Designation	0402	0603	0805	1206	1210	1812	2220	3640	5550
Length (L)	1.00 ± 0.1	1.60 ± 0.1	2.00 ± 0.2	3.20 ± 0.2	3.20 ± 0.2	4.50 ± 0.3	5.70 ± 0.4	9.20 ± 0.4	14.00 ±
Width (W)	0.50 ± 0.1	0.80 ± 0.1	1.25 ± 0.2	1.60 ± 0.2	2.50 ± 0.2	3.20 ± 0.2	5.00 ± 0.4	10.2 ± 0.4	12.70 ±
Thickness (T)	0.60	0.90	1.40	1.70	1.70	2.80	4.00	6.00	
Termination (P)	Min	0.10	0.25	0.25	0.25	0.25	0.25	0.80	
	Max	0.40	0.40	0.70	0.70	0.80	1.00	1.50	



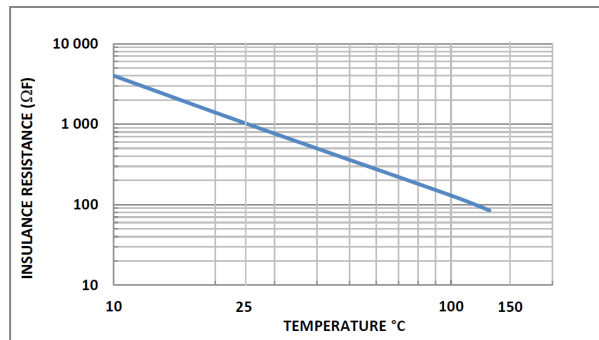
For P termination (Polymer type) add 0.20mm to all dimensions.

• **Typical Characteristics**

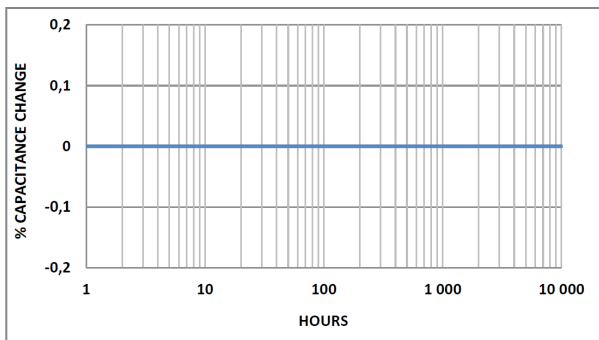
Temperature coefficient of capacitance



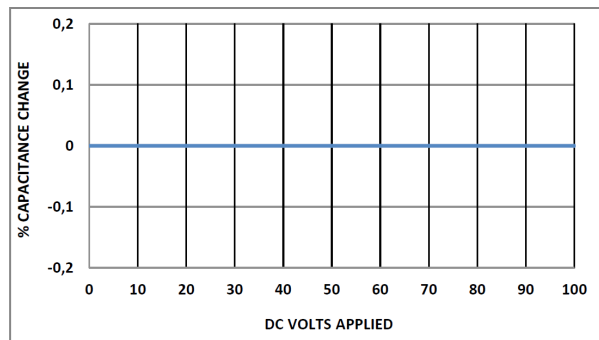
Insulation resistance vs. temperature



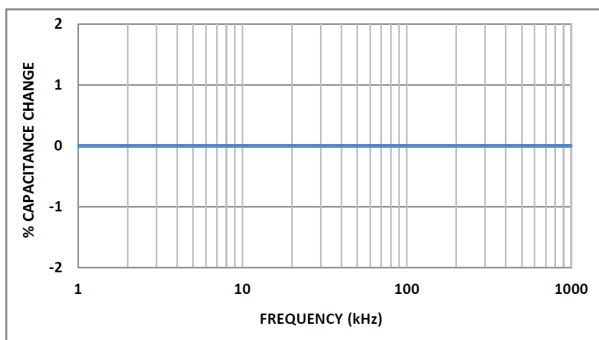
Aging rate



Voltage coefficient of capacitance



Change of Capacitance with Frequency



Dissipation factor vs. frequency

