NOVACAP NON MAGNETIC COMMERCIAL COG

NOVACAP manufactures surface mount capacitors that are completely magnetic free. These capacitors are designed to operate in magnetic free environments such as Magnetic Resonance Imaging (MRI) and Nuclear Magnetic Resonance (NMR) systems. Copper barrier terminations are available for soldering applications and palladium silver terminations for conductive epoxy. Please consult the factory for additional case sizes or custom designs.

COG

CAPACITANCE & VOLTAGE SELECTION

3 digit code: two significant digits, followed by number of zeros eg: 473 = 47,000 pF

MAX CAP & VOLTAGE

SIZE	0402	0504	0603	0805	1206	1210	1808	1812	1825	2221	2225
Min Cap	0R3	0R5	0R3	0R5	2R0	5R0	5R0	100	150	270	270
Tmax	0.024	0.044	0.035	0.054	0.064	0.065	0.065	0.065	0.080	0.080	0.080
16V	470	561	271	122	272	562	562	103	223	183	223
25V	390	471	221	102	272	562	562	103	223	183	223
50V	330	391	181	821	222	472	472	682	223	183	223
100V	330	391	181	821	182	392	332	562	153	123	153
200V	180	221	101	391	102	222	182	392	103	822	123
250V	120	121	680	271	821	152	152	272	822	682	822
300V	•	•	•	181	471	102	102	222	472	472	682
400V	•	•	•	181	391	821	102	222	472	472	682
500V	•	•	•	181	391	821	102	222	472	472	682
600V	•	•	•	151	331	681	821	182	392	392	562
800V*	•	•	•	151	331	681	821	182	392	392	562
1000V*	•	•	•	820	181	471	471	102	222	222	332
1500V*	•	•	•	•	101	271	271	561	122	102	152
2000V*	•	•	•	•	680	151	181	391	561	561	821
3000V*	•	•	•	•	•	•	820	181	271	221	331
4000V*	•	•	•	•	•	•	390	101	121	121	181
5000V*	•	•	•	•	•	•	•	•	820	820	121

DIMENSION INCHES(MM)

SIZE	0402	0504	0603	0805	1206	1210	1808	1812	1825	2221	2225
LENGTH L	.040 (1.02)	.050 (1.27)	.060 (1.52)	.080 (2.03)	.125 (3.18)	.125 (3.18)	.180 (4.57)	.180 (4.57)	.180 (4.57)	.220 (5.59)	.220 (5.59)
WIDTH W	.020 (.508)	.040 (1.02)	.030 (.762)	.050 (1.27)	.060 (1.52)	.100 (2.54)	.080 (2.03)	.125 (3.18)	.250 (3.18)	.210 (5.33)	.250 (3.18)
T MAX	.024 (.610)	.044 (1.12)	.035 (.889)	.054 (1.37)	.064 (1.63)	.065 (1.65)	.065 (1.65)	.065 (1.65)	.080 (2.03)	.080 (2.03)	.080 (2.03)
MB	.010 (.254)	.014 (.356)	.014 (.356)	.020 (.508)	.020 (.508)	.020 (.508)	.024 (.610)	.024 (.610)	.024 (.610)	.030 (.762)	.030 (.762)

TOLERANCE +/- INCHES(MM)

LENGTH L	.004 (.102)	.006 (.152)	.006 (.152)	.008 (.203)	.008 (.203)	.008 (.203)	.012 (.305)	.012 (.305)	.012 (.305)	.015 (.381)	.015 (.381)
WIDTH W	.004 (.102)	.006 (.152)	.006 (.152)	.008 (.203)	.008 (.203)	.008 (.203)	.008 (.203)	.008 (.203)	.015 (.381)	.015 (.381)	.015 (.381)
MB	.006 (.152)	.006 (.152)	.006 (.152)	.010 (.254)	.010 (.254)	.010 (.254)	.014 (.356)	.014 (.356)	.014 (.356)	.015 (.381)	.015 (.381)

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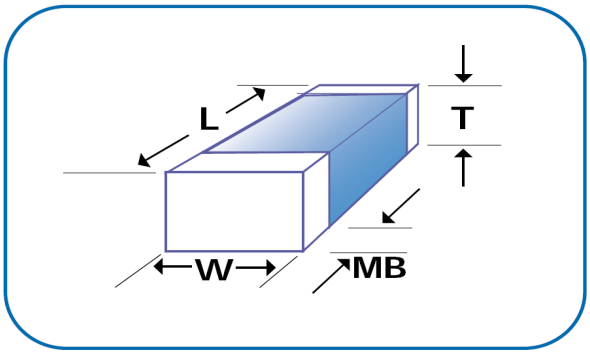

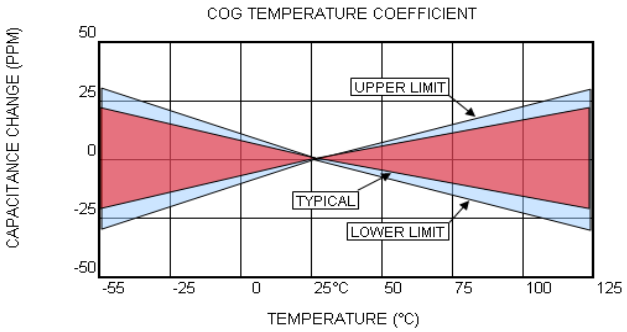

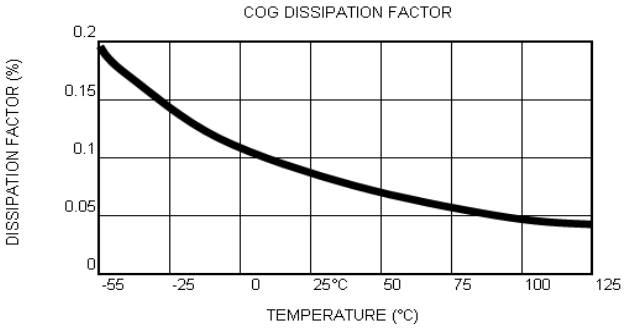

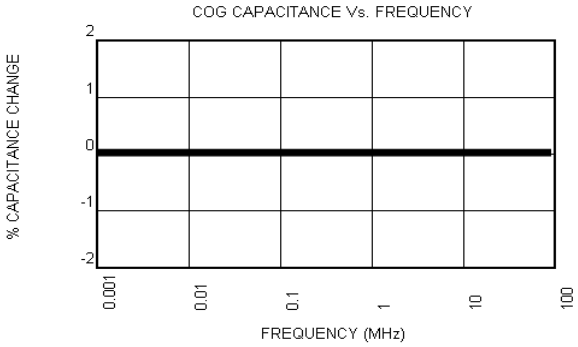

DIELECTRIC CHARACTERISTICS

Operating Temp Range	-55℃ to 125℃	Insulation Resist ance @ 25℃	>1000Ohm-Farad
Temp Coefficient	0±30PPM/℃	Insulation Resistance @ 1 25℃	>100Ohm-Farad
Dissipation Factor	.001 (0.1%) Max @ 25℃	Dielectric Withstanding Voltage	≤ 200V, 250%
Aging Rate	0% Per Decade		201-500V, 150%*
Test Parameters	1kHz, 1.0VRMS, 25℃	* or 500V, ** or 750V	>500V, 120%**
	1MHz for Cap ≤ 100pF	Whichever is greater	

HOW TO ORDER

1206	M	272	J	250	B	T
SIZE	**DIELECTRIC**	**CAPACITANCE**	**TOLERANCE**	**VOLTAGE VDCW**	**TERMINATION**	**PACKING OPTION**
See Chart	M = COG Magnetic Free	Value in Picofarads Two significant figures, followed by number of zeros: 104 = 100,000pF	B = +/- 0.1pF C = +/- 0.25pF D = +/- 0.5pF Cap < 10pF F = +/- 1 % G = +/- 2 % J = +/- 5 % K = +/- 10 %	Two significant figures, followed by number of zeros: 250 = 25V 101 = 100V 202 = 2000V	B = Copper Barrier (100% Tin) E = Copper Barrier (90% Tin/ 10% Lead) P = Palladium/Silver K = Solderable Palladium/Silver	T = Tape/Reel W = Waffle None = Bulk