



SMT-COG DIELECTRIC



Ultra stable Class I dielectric (EIA COG) or NPO:
 linear temperature coefficient, low loss, stable electrical properties with time, voltage and frequency. Designed for surface mount application with nickel barrier termination

suitable for solder wave, vapor phase or reflow solder board attachment. Also available with silver-palladium terminations for hybrid use with conductive epoxy. COG chips are used in precision circuitry requiring Class I stability.



➔ CAPACITANCE & VOLTAGE SELECTION FOR POPULAR CHIP SIZES

3 digit code: two significant digits, followed by number of zeros eg: 183 = 18,000 pF. R denotes decimal, eg. 2R7 = 2.7 pF

SIZE	0402	0504	0603	0805	1005	1206	1210	1808	1812	1825	2221	2225
Min Cap	0R3	0R5	0R3	0R5	0R5	0R5	0R5	0R5	100	150	270	270

MAX CAP & VOLTAGE

16V	271	222	152	682	822	153	273	393	563	104	104	124
25V	221	182	122	562	682	123	273	333	563	104	104	124
50V	181	152	102	392	562	123	223	223	393	104	104	124
100V	181	152	102	392	562	103	183	153	273	683	683	823
200V	101	821	561	182	272	562	103	103	183	473	473	563
250V	560	561	331	152	222	392	822	682	153	393	393	473
300V	.	.	.	821	122	272	472	472	103	273	223	273
400V	.	.	.	821	122	182	472	472	103	223	223	273
500V	.	.	.	821	122	182	472	472	103	223	223	273
600V	.	.	.	681	102	152	392	392	822	183	183	273
800V*	.	.	.	681	102	152	392	392	822	183	183	273
1000V*	.	.	.	471	391	102	222	222	472	123	103	153
1500V*	.	.	.	.	.	561	122	122	272	562	562	822
2000V*	.	.	.	.	.	391	122	821	182	272	272	392
3000V*	.	.	.	.	.	.	.	391	821	122	122	182
4000V*	.	.	.	.	.	.	.	221	471	681	681	102

*Units rated above 800V may require conformal coating in use to preclude arcing over the chip surface.

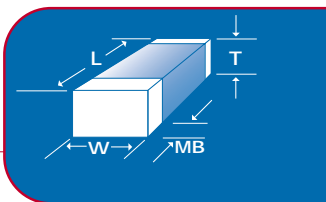




PRODUCT OFFERING



See chart for standard EIA case sizes and available capacitance and voltage ratings. Special sizes, thickness and other voltage ratings are available, see other NOVACAP product offerings. High reliability testing is available per MIL-PRF-55681, MIL-PRF-123, or to customer SCD. Please consult the factory with your requirements. NOVACAP has complete testing facilities at your disposal.



DIMENSIONS +/- INCHES (MM)

SIZE	0402	0504	0603	0805	1005	1206	1210	1808	1812	1825	2221	2225
LENGTH L	.040 (1.02)	.050 (1.27)	.060 (1.52)	.080 (2.03)	.100 (2.54)	.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 (.760)	.050 (1.27)	.050 (1.27)	.060 (1.52)	.100 (2.54)	.080 (2.03)	.125 (3.18)	.250 (6.35)	.210 (5.33)	.250 (6.35)
T MAX.	.024 (.610)	.044 (1.12)	.035 (.889)	.054 (1.37)	.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 (.355)	.014 (.355)	.020 (.508)	.020 (.508)	.020 (.508)	.020 (.508)	.024 (.610)	.024 (.610)	.024 (.610)	.030 (.760)	.030 (.760)

TOLERANCES +/- INCHES (MM)

LENGTH	.004 (.102)	.006 (.152)	.006 (.152)	.008 (.203)	.008 (.203)	.008 (.203)	.008 (.203)	.012 (.305)	.012 (.305)	.012 (.305)	.015 (.380)	.015 (.380)
WIDTH	.004 (.102)	.006 (.152)	.006 (.152)	.008 (.203)	.008 (.203)	.008 (.203)	.008 (.203)	.008 (.203)	.008 (.203)	.015 (.380)	.015 (.380)	.015 (.380)
MB	.006 (.152)	.006 (.152)	.006 (.152)	.010 (.254)	.010 (.254)	.010 (.254)	.010 (.254)	.014 (.355)	.014 (.355)	.014 (.355)	.015 (.380)	.015 (.380)

HOW TO ORDER

1206	N	272	J	101	N	X	T	M
SIZE See Chart	DIELECTRIC N = COG	CAPACITANCE Value in Picofarads Two significant figures, followed by number of zeros: 272 = 2700 pF	TOLERANCE B = 0.10 pF (0.1 to 10 pF) C = 0.25 pF (0.1 to 10 pF) D = 0.50 pF (0.1 to 20 pF) F = +/- 1.0 % G = +/- 2.0 % H = +/- 3.0 % J = +/- 5.0 % K = +/- 10 % M = +/- 20 % Z = +80% -20% P = +100% -0%	VOLTAGE-VDCW Two significant figures, followed by number of zeros: 101 = 100V	TERMINATION N = Nickel Barrier (100% Sn) P = Palladium Silver Y = Nickel Barrier (90Sn/10Pb)	THICKNESS OPTION X = Non-standard thickness. Specify in Mils if non-standard is required. Standard items are any thickness to Max. shown in charts.	PACKING OPTION T = Reeled	MARKING OPTION M = Marked (See Marking Specifications)