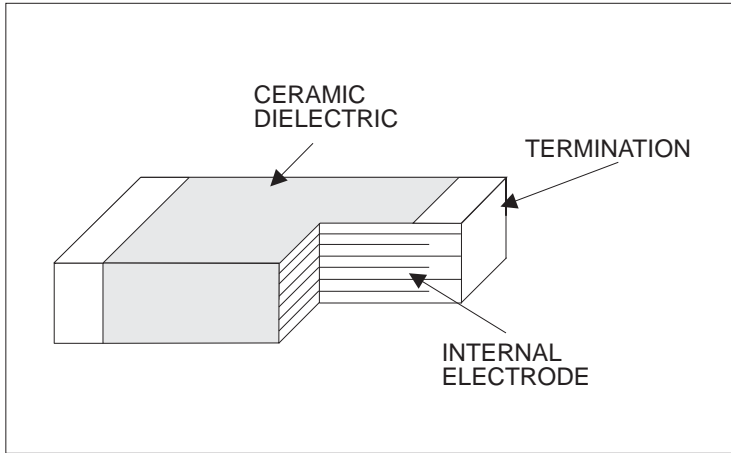




Ceramic Chip Capacitors - NPO & COG Dielectric



Application

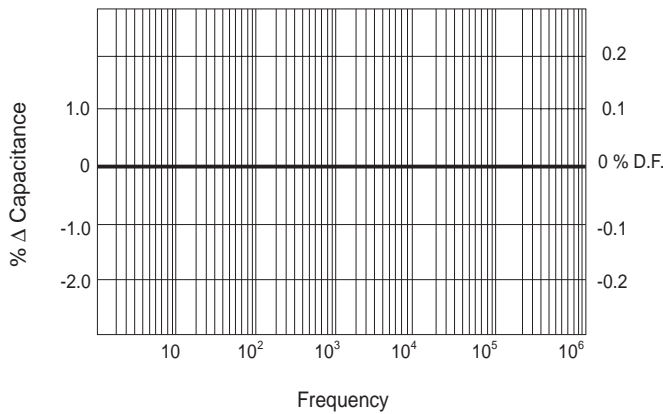
NPO (COG) dielectric properties suiter for precision circuits, requiring stable dielectric characteristics:

- * Negligible dependence of capacitance and dissipation factor on time, voltage, and frequency
- * Low-loss (High Q)
- * Predictable linear temperature coefficient
- * No Piezoelectric behavior

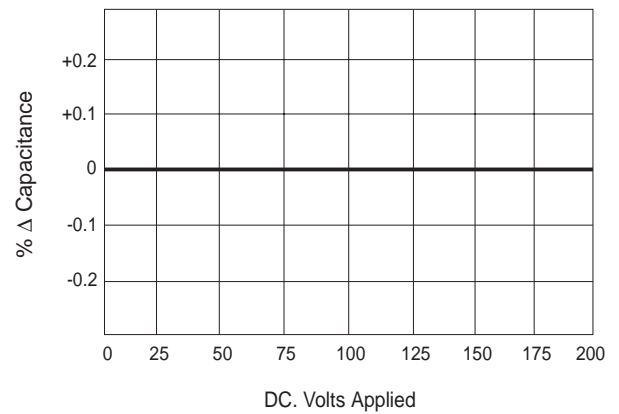
General Specification

- Operating temperature range -55°C ~ +125°C
- Capacitance Range: 10pF ~ 0.01uF
- Capacitance Tolerance: ±0.25pF, ±0.5pF, ±5%, ±10%
- Voltage Ratings, 50VDC, 100VDC, 200VDC
- Dissipation Factor (1 KHz, or MHz, 1 Vrms, 25°C) 0.15% Max
- Insulation Resistance (rated voltage applied at 25°C) 100,000 megohms or 1,000 Ohm-Farads min.
- Dielectric strength > 2.5X WV. DC.

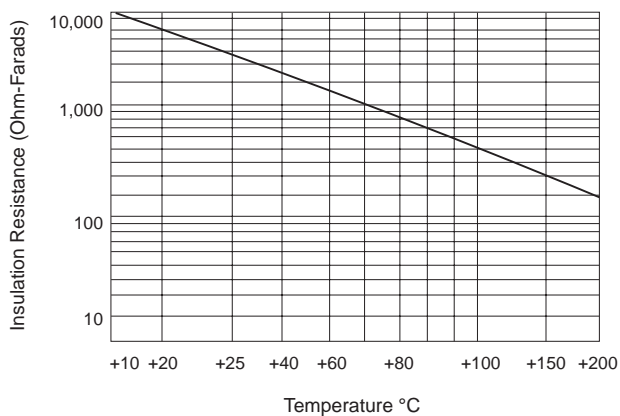
Δ C, D.F. vs. Frequency Coefficient



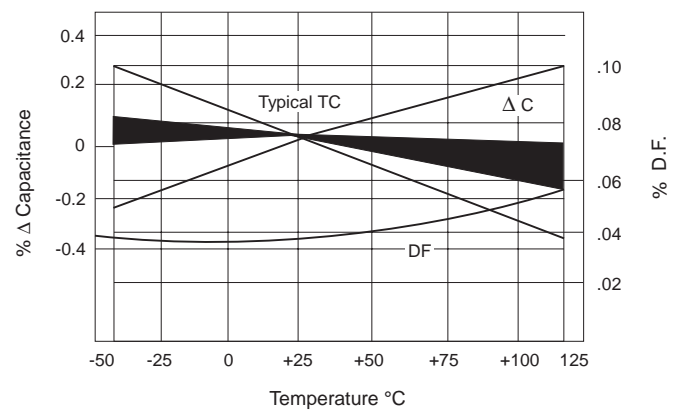
Δ C, vs. Voltage Coefficient



Insulation Resistance vs. Temp



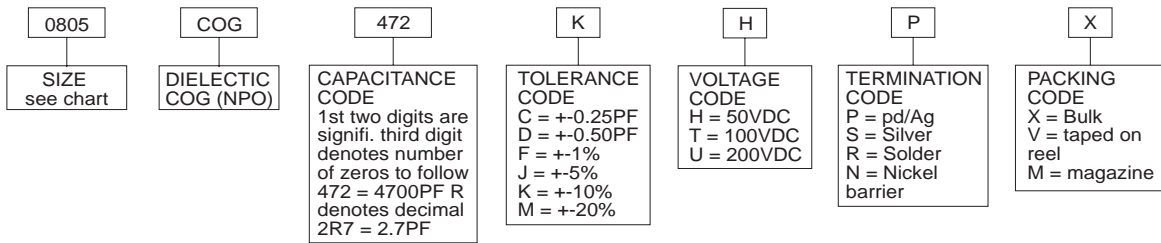
Δ C, D.F. vs. Temperature Coefficient





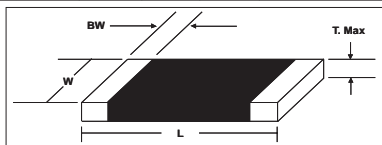
Ceramic Chip Capacitors - NPO & COG Dielectric

Part Number System



SIZES AND VALUES AVAILABLE

1:1 STYLE		0805			1206			1210			1805			1808			1812			2220			
* L (mm, in)		2.0	0.080		3.2	0.126		3.2	0.126		4.5	0.177		4.5	0.177		4.5	0.177		5.6	0.220		
* W (mm, in)		1.25	0.050		1.6	0.063		2.5	0.098		1.25	0.05		2.0	0.079		3.2	0.126		5.0	0.197		
T Max (mm, in)		1.25	0.050		1.25	0.050		1.5	0.060		1.25	0.050		1.5	0.060		1.9	0.075		2.0	0.079		
EB Min (mm, in)		0.2	0.008		0.3	0.012		0.3	0.012		0.3	0.012		0.3	0.012		0.3	0.012		0.3	0.012		
CAP. (PF)	Tol.	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	WV (DC)	
		50	100	200	50	100	200	50	100	200	50	100	200	50	100	200	50	100	200	50	100	200	
10	J.K.	↓	↓	↓																			
12	J.K.	↓	↓	↓																			
15	J.K.	↓	↓	↓																			
18	J.K.	↓	↓	↓	↓	↓	↓																
22	J.K.	↓	↓	↓	↓	↓	↓	↓															
27	J.K.	↓	↓	↓	↓	↓	↓	↓	↓														
33	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓													
39	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓												
47	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓											
58	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓										
68	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓									
82	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓								
100	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓							
120	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓						
150	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
180	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓				
220	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
270	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓		
330	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
390	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
470	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
560	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
680	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
820	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
1,000	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
1,200	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
1,500	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
1,800	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
2,200	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
2,700	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
3,300	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
3,900	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
4,700	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
5,600	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
6,800	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
8,200	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
10,000	J.K.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓



* Tolerance +/-0.01", 7% Whichever is greater