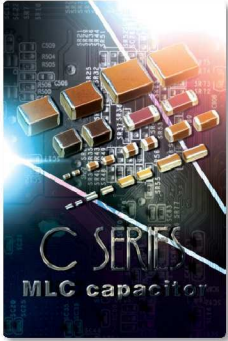


C SERIES | High Q / F&G Tol. Capacitor

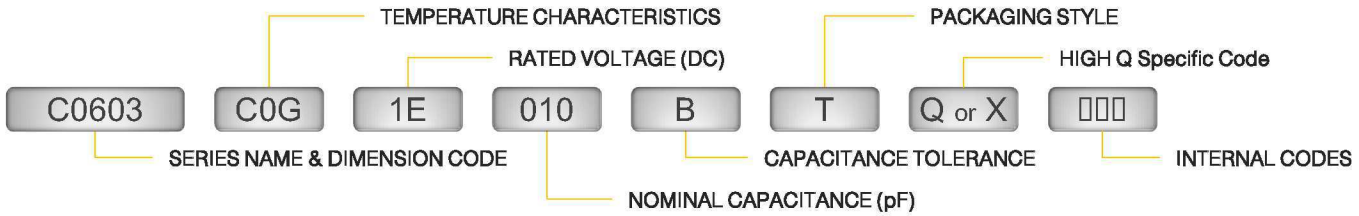


TDK High Q multilayer ceramic chip capacitors (MLCCs) are offered in ultra small metric 0603 (EIA0201) body size. This is offered in C0G temperature characteristics (operating temperature range: -55°C to 125°C), making them ideal for use in higher temperature circuit requirements. C0G is a highly stable material offering temperature stability, low loss, and excellent frequency and voltage performance. This material class also offers excellent attenuation and high self resonant frequency.

High Q series are offered in capacitance tolerance as tight as $\pm 0.05\text{pF}$ and as wide as $\pm 5\%$ for higher capacitance value. This series is an excellent solution for mobile multimedia and wireless applications as well as in applications such as but not limited to Bluetooth, GPS, satellite TV and radios.

Case Code	L (mm)	W (mm)	T (mm)
C0603/0201	0.60	0.30	0.30
C1005/0402	1.00	0.50	0.50
C1608/0603	1.60	0.80	0.80

Part Number Description



Features:

- ❖ Higher Q (lower loss) than standard capacitors
- ❖ Available in standard and tight tolerance
- ❖ Same C0G(Class I) BME material
- ❖ Compact case sizes (as small as 0.6 x 0.3 mm)

Applications:

- ❖ PA module
- ❖ Wireless communications/mobile phones
- ❖ Filter networks/matching networks
- ❖ DC blocking
- ❖ High frequency circuits

A 0603 size (0.6 mm x 0.3 mm) multilayer ceramic chip capacitor is smaller than a strawberry seed.

Item	Size (mm)
Rice	3216
Sesame seed	1005
Strawberry seed	0603

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C SERIES | High Q/Tight Tolerance / COG

Capacitance (pF)	Cap Code	C0603/0201 1E (25V)						
		W ±0.05pF	B ±0.10pF	E ±0.20pF	C ±0.25pF	D ±0.50pF	G ±2%	J ±5%
0.2	0R2	COG	COG					
0.3	0R3	COG	COG					
0.4	0R4	COG	COG					
0.5	0R5	COG	COG					
0.6	0R6	COG	COG					
0.7	0R7	COG	COG					
0.8	0R8	COG	COG					
0.9	0R9	COG	COG					
1.0	0I0				COG			
1.1	1R1				COG			
1.2	1R2				COG			
1.3	1R3				COG			
1.5	1R5				COG			
1.6	1R6				COG			
1.8	1R8				COG			
2.0	020				COG			
2.2	2R2				COG			
2.4	2R4				COG			
2.7	2R7				COG			
3.0	030				COG			
3.3	3R3				COG			
3.6	3R6				COG			
3.9	3R9				COG			
4.0	040				COG			
4.3	4R3				COG			
4.7	4R7				COG			
5.0	050				COG			
5.1	5R1				COG			
5.6	5R6				COG			
6.0	060				COG			
6.2	6R2				COG			
6.8	6R8				COG			
7.0	070				COG			
7.5	7R5				COG			
8.0	080				COG			
8.2	8R2				COG			
9.0	090				COG			
9.1	9R1				COG			
10	100			COG		COG		
11	110					COG	COG	
12	120					COG	COG	
13	130					COG	COG	
15	150					COG	COG	
16	160					COG	COG	
18	180					COG	COG	
20	200					COG	COG	

Capacitance (pF)	Cap Code	C1005/0402 1H (50V)		C1608/0603			
		F ±1%	G ±2%	1H (50V)		2A (100V)	
				F ±1%	G ±2%	F ±1%	G ±2%
15	150	COG	COG	COG	COG		
22	220	COG	COG	COG	COG		
33	330	COG	COG	COG	COG		
47	470	COG	COG	COG	COG		
68	680	COG	COG	COG	COG		
100	101					COG	COG
150	151					COG	COG
220	221					COG	COG
330	331					COG	COG
470	471					COG	COG
680	681					COG	COG
1,000	102					COG	COG

COG