

SMD Type - High Frequency Capacitors

SAMWHA high frequency MLCC(CF) products offers excellent performance in demanding high RF power applications requiring consistent and reliable operation .

The copper electrodes allow for Ultra -low ESR and high Q in the GHz frequencies.

The CF series products are your best choice for high RF power applications from UHF through microwave frequencies.

Applications

- RF Power Amplifiers, Low Noise Amplifiers
- Filter Networks
- Cable TV and telecommunication networks
- GPS, Bluetooth and TV set-top boxes
- MRI Systems

Features

- Ultra Low ESR
- High Q
- High Self Resonance
- Capacitance Range : 0.5pF to 100pF
- Temperature characteristics : COG

How to Order(Product Identification)

CF 2012 COG 101 J 251 N R B

1 2 3 4 5 6 7 8 9

1 CF : High Frequency(SMD)

2 Size Code

This is expressed in tens of a millimeter.

The first two digits are the length, The last two digits are width.

3 Temperature Coefficient Code

Classification	Code	Temperature Range	Temperature Coefficient
Class I	C0G	-55 to +125°C	±30 ppm/°C

4 Capacitance Code(Pico farads)

The nominal capacitance value in pF is expressed by three digit numbers.

The first two digits represents significant figures and the last digit denotes the number of zero

Ex.) 104 = 100000pF R denotes decimal 8R2 = 8.2pF

5 Capacitance Tolerance Code

Code	Tolerance	Code	Tolerance
B	±0.1pF	G	±2.0%
C	±0.25pF	J	±5%
D	±0.5pF	K	±10%
F	±1.0%	M	±20%

6 Voltage Code

Code	250	500	101	201	251
Rated Voltage	DC 25V	DC 50V	DC 100V	DC 200V	DC 250V

7 Termination Code

N : Nickel-Tin Plate

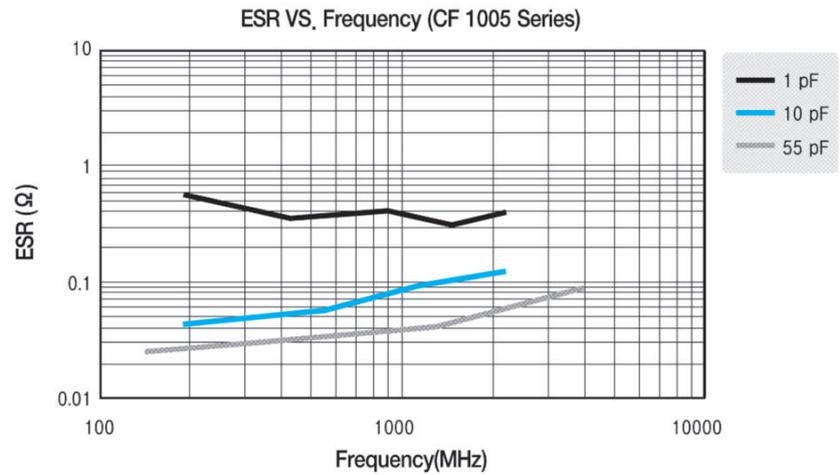
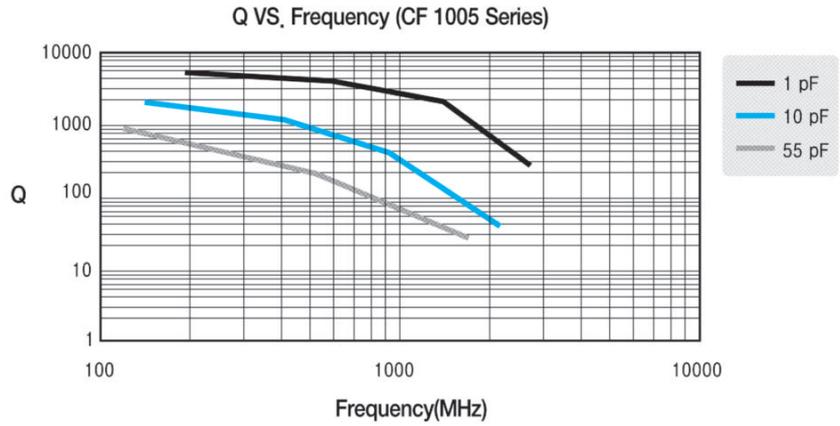
8 Packing Code

R : Reel Type, B : Bulk Type

9 Thickness Option

Size(mm)	Thickness(mm)		Code	Size(mm)	Thickness(mm)		Code
	t	Tol(±)			t	Tol(±)	
0603/1005	0.3	0.03	-	3216	1.15	0.15	E
1005	0.5	0.05	-	3216/3225	1.6	0.2	I
2012	0.6	0.1	A	3225	1.8	0.2	J
1608	0.8	0.1	B	3225/4532/5750	2	0.25	K
2012/3216	0.85	0.15	B	3225/4532/5750	2.5	0.25	L
2012	1.25	0.15	E				

Size(mm)	Code	Packaging	Size(mm)	Code	Packaging
0603/1005	-	Paper Taping	3216	E	Embossed Taping
1005	-	Paper Taping	3216/3225	I	Embossed Taping
2012	A	Paper Taping	3225	J	Embossed Taping
1608	B	Paper Taping	3225/4532/5750	K	Embossed Taping
2012/3216	B	Paper Taping	3225/4532/5750	L	Embossed Taping
2012	E	Embossed Taping			



Appendix I

C0G-Temperature Compensating Type(0603~2012)

Type	C0G					
	1005(0402)		1608(0603)		2012(0805)	
Size(inch)						
Volt(V)	25	50	50	100	50	100
Cap.						
0.5 pF(0R5)						
1 pF(010)						
2 pF(020)						
3 pF(030)						
4 pF(040)						
5 pF(050)						
6 pF(060)						
7 pF(070)						
8 pF(080)						
9 pF(090)						
10 pF(100)						
12 pF(120)						
15 pF(150)						
18 pF(180)						
22 pF(220)						
27 pF(270)						
33 pF(330)						
39 pF(390)						
47 pF(470)						
56 pF(560)						
68 pF(680)						
82 pF(820)						
100 pF(101)						