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 : C0G

How to Order(Product Identification)

CF	2012	C0G	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	Capacitance ToleranceClass
Class I	C0G	−55 to +125℃	±30 ppm/℃

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	±2.0%

6 Voltage Code

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

7 Termination Code

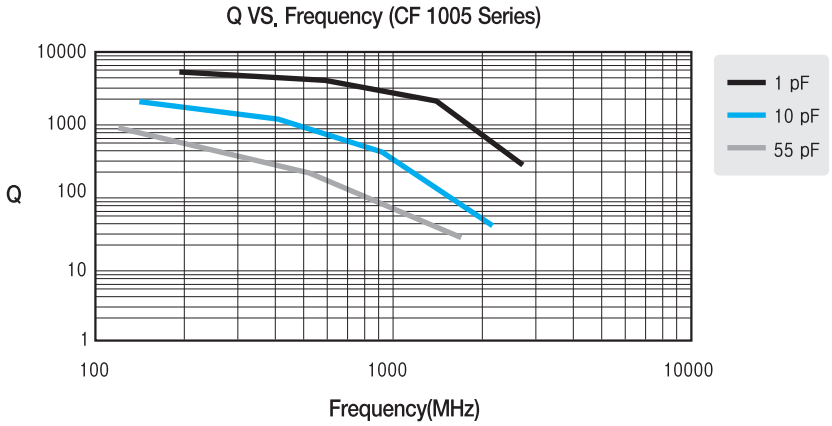
N : Nickel-Tin Plate

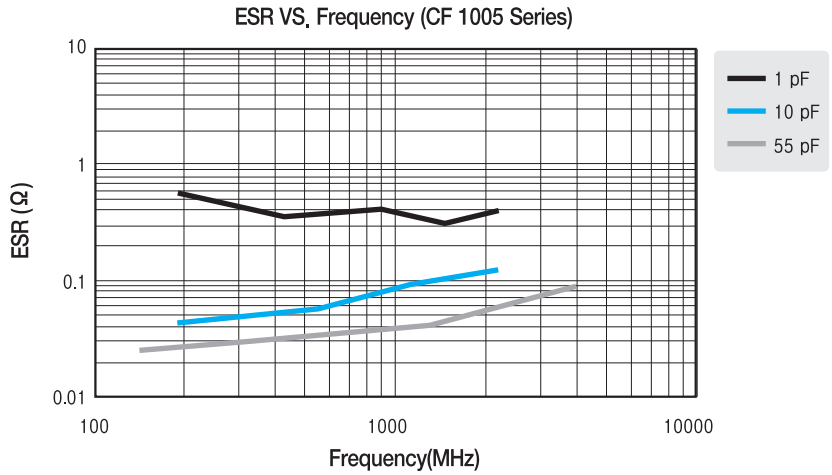
8 Packing Code

R : Reel Type, B : Bulk Type

9 Thickness Option

Thickness(mm)		Code	Thickness(mm)		Code
t	Tol(±)		t	Tol(±)	
0.50	0.05	Blank	1.25	0.15	E
0.60	0.10	A	1.30	0.20	E
0.80	0.10	B	1.35	0.20	H
0.85	0.15	B	1.60	0.20	I
1.00	0.15	E	1.80	0.20	J
1.10	0.15	E	2.00	0.25	K
1.15	0.15	E	2.50	0.25	L





Appendix |

C0G-Temperature Compensating Type(0603~2012)

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