

MULTILAYER CERAMIC CHIP CAPACITORS (MLCC)

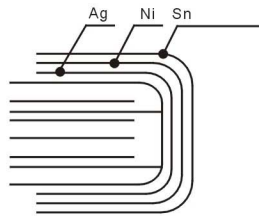


Features

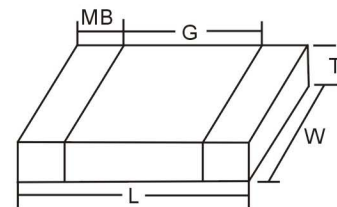
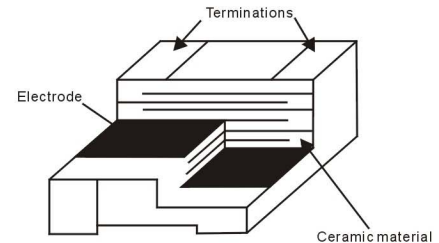
- Various temperature characteristics a wide range in small size.
- Mounted either by flow soldering methods.
- Excellent dielectric strength due to uniform structure of dielectric layers.
- 500V~3000VDC high voltage application.

Applications

- MLCC are becoming increasingly important key electronic applications, which are helpful in reducing the size of electronic circuitry.
- MLCC are used extensively in computers, communicative products, and the detail applications which including the following:
 - By-Passing of an AC Signal
 - Frequency Discrimination
 - Transient Voltage and Are Suppression
 - Surge Protection



Construction of MLCC



Unit:mm

Part Number Code

C0805	N	120	J	IH	N	T
(1)	(2)	(3)	(4)	(5)	(6)	(7)

Size Code

Size Code	L	W	T	MB	G(min)
0201	0.60±0.05	0.30±0.05	S:0.50±0.20	0.10~0.20	0.2
0402	1.00±0.05	0.50±0.05	S:0.50±0.10	0.15~0.35	0.3
0603	1.60±0.15	0.80±0.12	P:0.75±0.30 S:0.60±0.20	0.27~0.60	0.5
0805	2.0±0.2	1.25±0.20	M:0.75±0.20 H:0.95±0.30 X:1.30±0.30 S:0.60±0.20	0.30~0.70	0.7
1206	3.2±0.2	1.60±0.20	M:0.75±0.20 H:0.95±0.30 X:1.30±0.30	0.30~0.70	1.5
1210	3.2±0.2	2.5±0.2	L:1.80±0.40 X:1.30±0.30		
1808	4.5±0.3	2.0±0.20	F:1.60±0.40 Z:2.00±0.40	0.35~0.95	0.2
1812	4.5±0.3	3.2±0.3	X:1.30±0.30	0.35~1.00	2.0
2220	5.7±0.5	5.0±0.5	F:1.60±0.40	0.35~1.2	3.0
2225	5.7±0.5	6.3±0.5	Z:2.00±0.40	0.35~1.2	3.0
3035	7.6±0.5	9.0±0.5	E:2.50±0.40 A:3.00±0.50	0.5~1.5	3.5

Temperature Characteristic

Code	N	B	Y	E
Dielectric type	COG	X7R/X5R	Y5V	Z5U
Temp.range	-55~125℃	-55~125℃/-55~85℃	-30~85℃	+10~85℃
Cap.chang	0±60-250ppm	±15%	+22~-82%	+22~-56%

Capacitance (Example)

Code(EIA code)	Cap.(pF)	Code(EIA code)	Cap.(pF)
0R5	0.5	101	100
2R0	2.0	102	1000(1nF)
100	10	105	1,000,000(1uF)

Capacitance Tolerance

Product or capacitance	NPO, C<10pF				NPO, C>10pF		
Code	A	B	C	D			
Tolerance	±0.05pF	±0.10pF	±0.25pF	±0.50pF			
Product or capacitance	X7R				Y5V		
Code	F	G	J	K			
Tolerance	±1.0%	±2.0%	±5.0%	±10%			
Product or capacitance	Z5U				Z		
Code	J	K	M	M	Z	M	Z
Tolerance	±5.0%	±10%	±20%	±20%	-20~+80%	±20%	-20~+80%

Voltage

Code	OJ	1A	1C	1E	1H	2A	2E
Rated Voltage	6.3VDC	10VDC	16VDC	25VDC	50VDC	100VDC	250VDC(AC)
Code	2D	2H	2J	3A	3D	3F	3G
Rated Voltage	200VDC	500VDC	630VDC	1KVDC	2KVDC	3KVDC	4KVDC

Termination

N=Nickel barrier
S=Sliver(option)
T=Nickel barrier with 100% Tin (option)

Termination

B=Bulk
5=500pcs/Reel, 1=1K/Reel, 2=2KReel, 3=3K/Reel (for plastic tape only)
T=4K/Reel
U=10K/Reel, S=15K/Reel
V=16K/Reel
W=20K/Reel