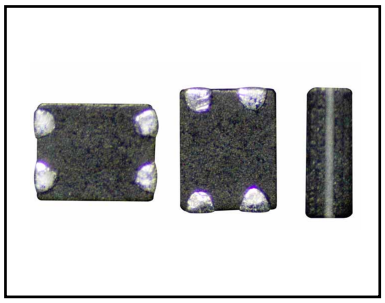
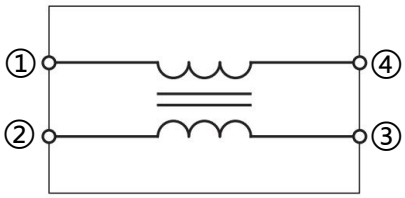
Desicription

- The common mode filter is mainly used to reduce radiation and high frequency common mode noise.
- Reduce asymmetric interference on data lines and other interfaces.
- Impedance characteristics match the impedance of most differential interface Settings, controlling unnecessary reflection formation
- Low leakage, no effect on differential mode current.



Features

- Size:1.25mm*1.0mm*0.5mm
- Halogen free ,Lead free ,Reach and RoHs
- USB3.0 ,HDMI,MIPI,DP,LVDS.



Circuit Diagram

Application

- Cellular phones
- Portable devices
- Digital cameras
- Player
- Smart home
- Robot

PIN NUMBER	DESCRIPTION
① ~ ④	DATE LINE
② ~ ③	DATE LINE

Order information

Model	Package	shipping
CMF1210UD900MST	**1210**	**4000/Tape&Reel**

Part Numbering

CMF	1210	UD	900	M	S	T
A	B	C	D	E	F	G

A:ASIM common mode filter

B:Dimension

C:Cut-off frequency (6 GHz Typ)

D:Common Mode Impedance (at 100MHz), 900= 90Ω

E:Tolerance of common mode impedance, M= ±20%

F:Laminated sintering process.

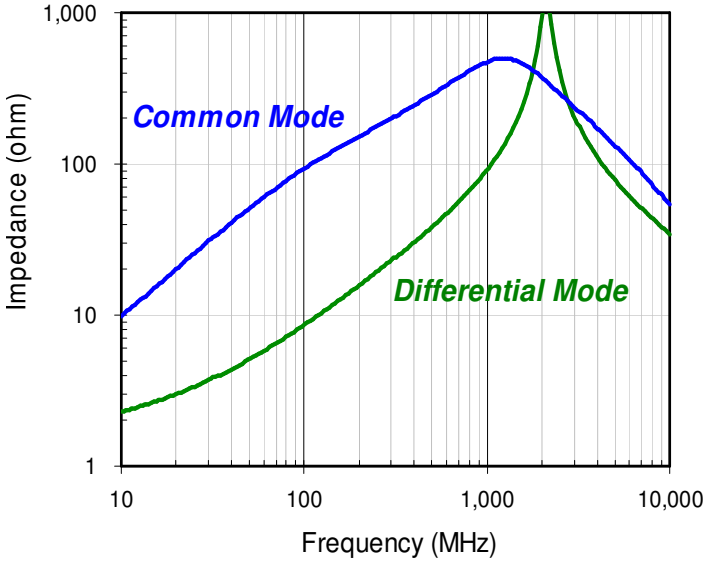
G:Packing Type

Specification

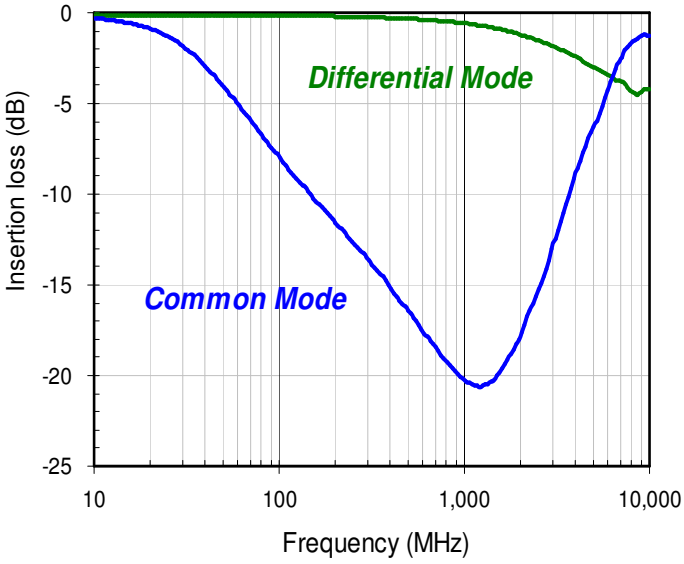
Part number	Common mode impedance(Ω) @100MHz	Rated Current (mA)	DC Resistance (Ω)	
			TYP	MAX
CMF1210UD900MST	90±20%	130	1.5	3
	Rated volt (Vdc)	**Withstand volt (Vdc)**	**IR (Ω) min**	
	5	12.5	10M	
	Operation junction temperature	**Lead temperature**	**Storage temperature***	
	-40℃~+85℃	260℃	-40℃~85℃	

*The storage temperature is subject to the fixed substrate

Typical Electrical Characteristic

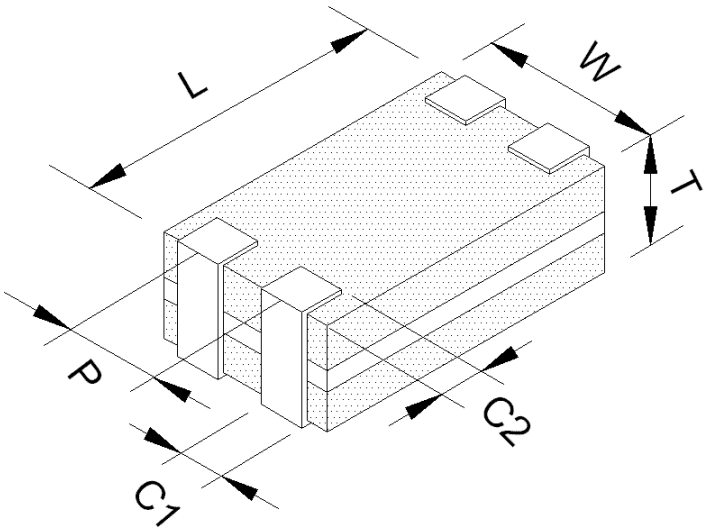


Impedance VS Frequency



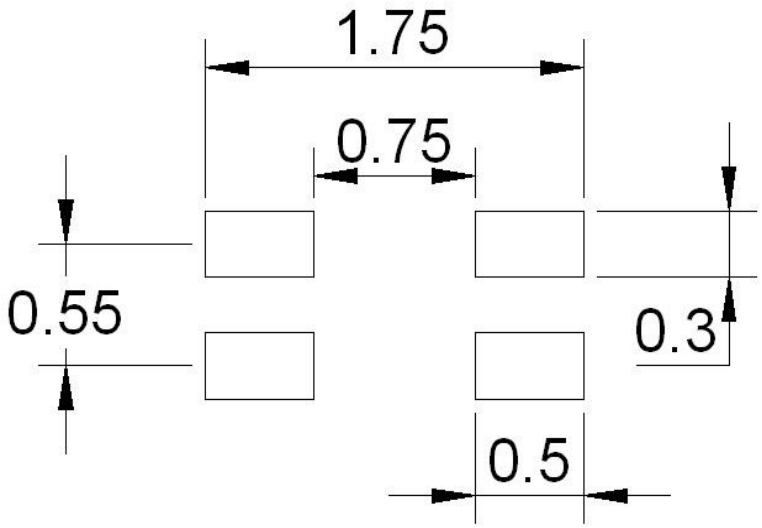
Insertion loss VS Frequency

Dimension (mm)

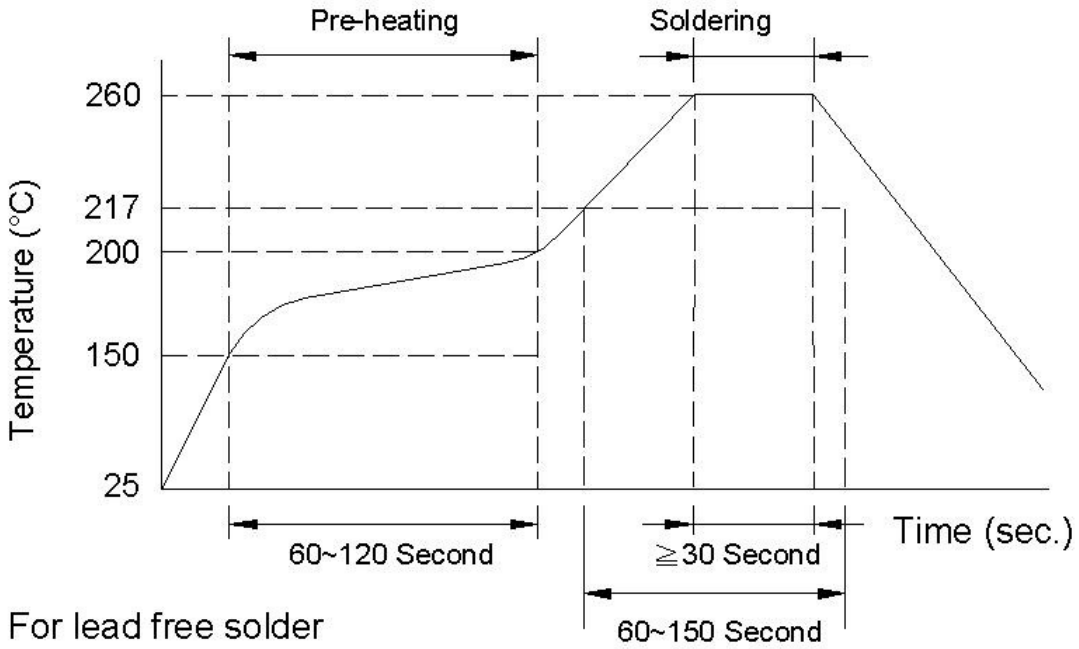


TYPE	Dimension
L	1.25±0.10
W	1.00±0.10
T	0.50±0.10
P	0.55±0.10
C1	0.30±0.10
C2	0.20±0.15
Unit：mm	

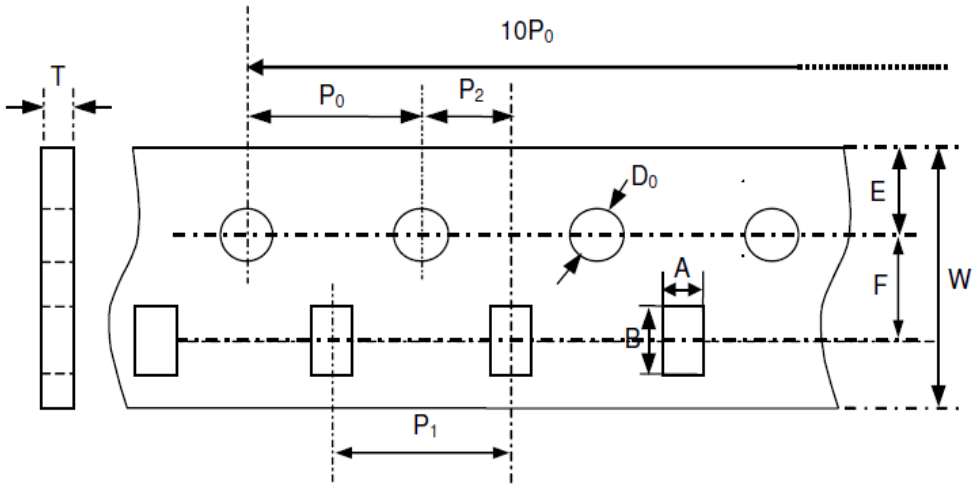
Recommended Land Pattern (mm)



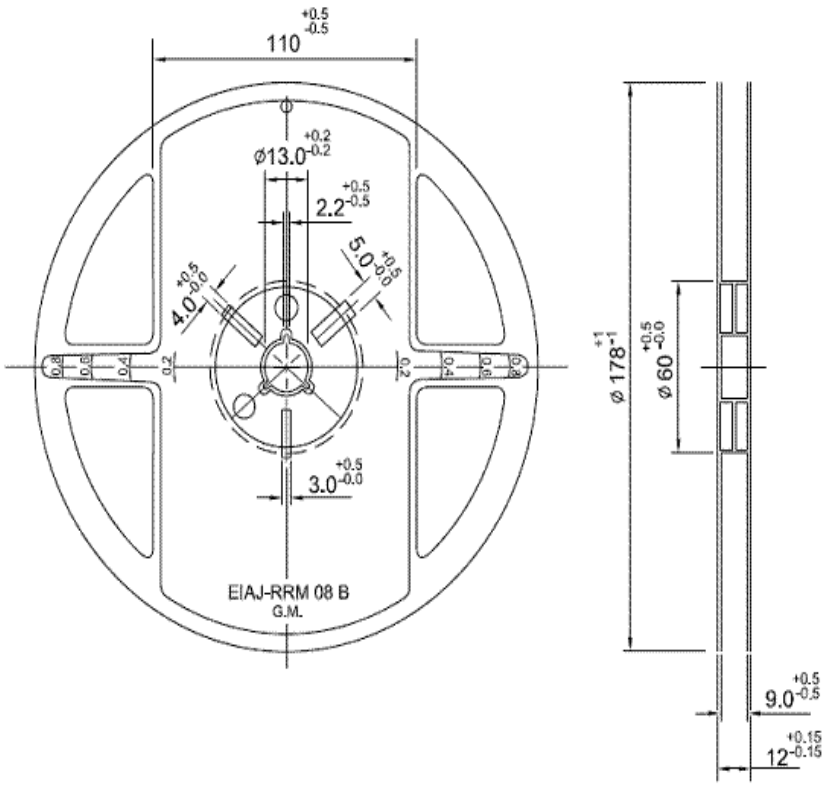
Recommended Reflow Profile



Tape and reel specification/Taping dimensions (mm)



Symbol	Size	Symbol	Size
A	1.20±0.05	Po	4.00±0.10
B	1.45±0.05	P1	4.00±0.10
W	8.00±0.10	P2	2.00±0.05
E	1.75±0.05	Do	1.55±0.05
F	3.50±0.05	T	0.60±0.03



Reliability and test condition

Test item	Test condition	Criteria
Temperature Cycle	A. Temperature : -40 ~ +85℃ B. Cycle : 100 cycles C. Dwell time : 30minutes Measurement : at ambient temperature 24 hrs after test completion	A. No mechanical damage B.Impedance value should be within ± 20 % of the initial value
Operational Life	A. Temperature : 85℃ ± 5℃ B. Test time : 1000 hrs C. Apply current : full rated current Measurement : at ambient temperature 24 hrs after test completion	A. No mechanical damage B.Impedance value should be within ± 20 % of the initial value
Biased Humidity	A. Temperature : 40 ± 2℃ B. Humidity : 90 ~ 95 % RH C. Test time : 1000 hrs D. Apply current : full rated current Measurement : at ambient temperature 24 hrs after test completion	A. No mechanical damage B. Impedance value should be within ± 20 % of the initial value
Resistance to Solder Heat	A. Solder temperature : 260 ± 5℃ B. Flux : Rosin C. DIP time : 10 ± 1 sec	A. More than 95 % of terminal electrode should be covered with new solder B. No mechanical damage C.Impedance value should be within ± 20 % of the initial value
Steam Aging Test	A. Temperature : 93 ± 2℃ B. Test time : 4 hrs C. Solder temperature : 235 ± 5℃ D. Flux : Rosin E. DIP time : 5 ± 1 sec	More than 95 % of terminal electrode should be covered with new solder