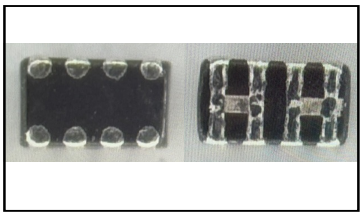
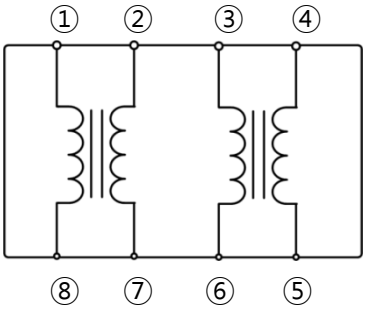
Desicription

- 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:2.0mm*1.2mm*0.8mm
- LVDS lines in notebook computers;
- USB2.0, IEEE1394, DVI, HDMI lines in PDP;
- LCD TV, DVD Player, PC, Audio player, DSC;
- MDDI, MIPI in mobile phone。



Circuit Diagram

Application

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

PIN NUMBER	DESCRIPTION
① ~ ⑧	DATE LINE
② ~ ⑦	DATE LINE
③ ~ ⑥	DATE LINE
④ ~ ⑤	DATE LINE

Order information

Model	Package	shipping
CMF2012DH900MST-4P	**2012**	**3000/Tape&Reel**

Part Numbering

CMF	2012	DH	900	M	S	T	4P
A	B	C	D	E	F	G	H

A:ASIM common mode filter

B:Dimension

C:Ordinary high speed differential signal

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

E:Tolerance of common mode impedance, M= ±25%

F:Internal definition.

G:Packing Type

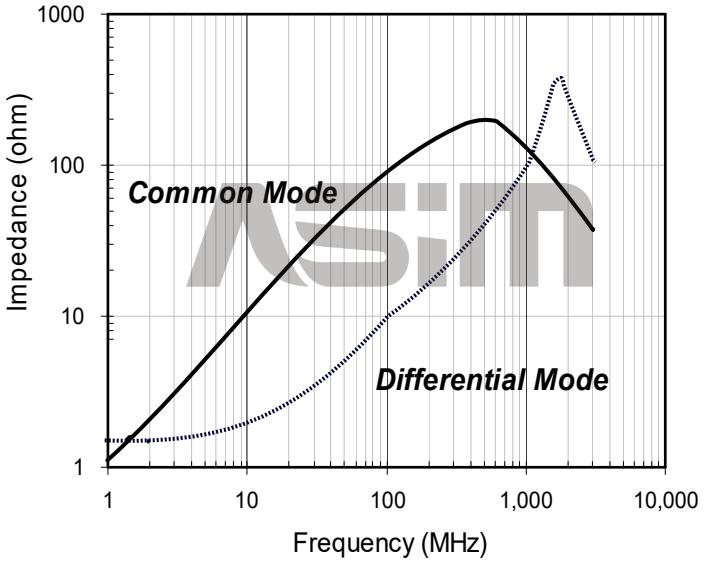
H:4 lines

Specification

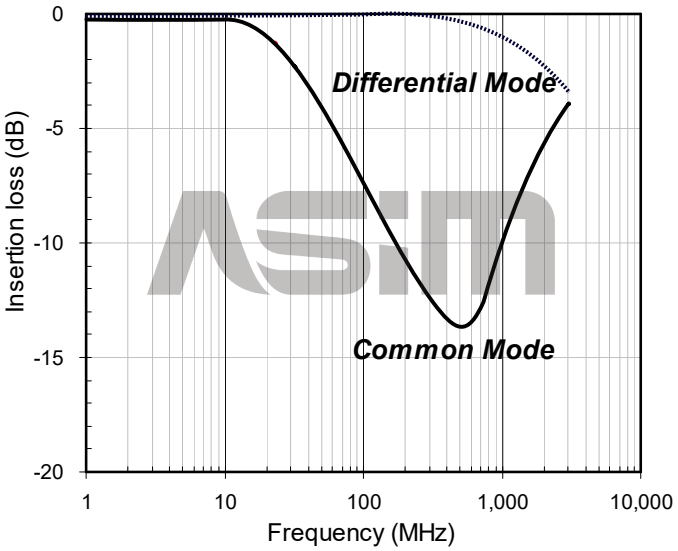
Part number	Common mode impedance(Ω) @100MHz	Rated Current (mA)	DC Resistance (Ω) max
CMF2012DH900MST-4P	90±25%	400	0.6
	Rated volt (Vdc)	**Withstand volt (Vdc)**	**IR (Ω) min**
	10.0	25.0	200M
	Operation junction temperature	**Lead temperature**	**Storage temperature***
	-40℃~+85℃	260℃	-40℃~85℃

*The storage temperature is subject to the fixed substrate

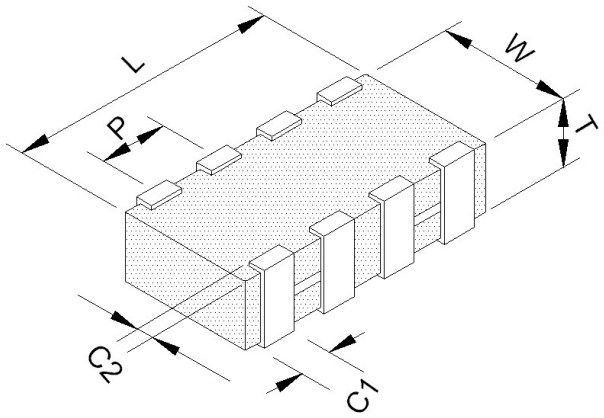
Performance Curves



Transmission Characteristics

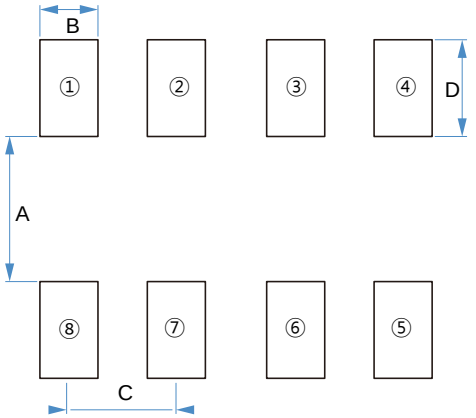


Dimension (mm)



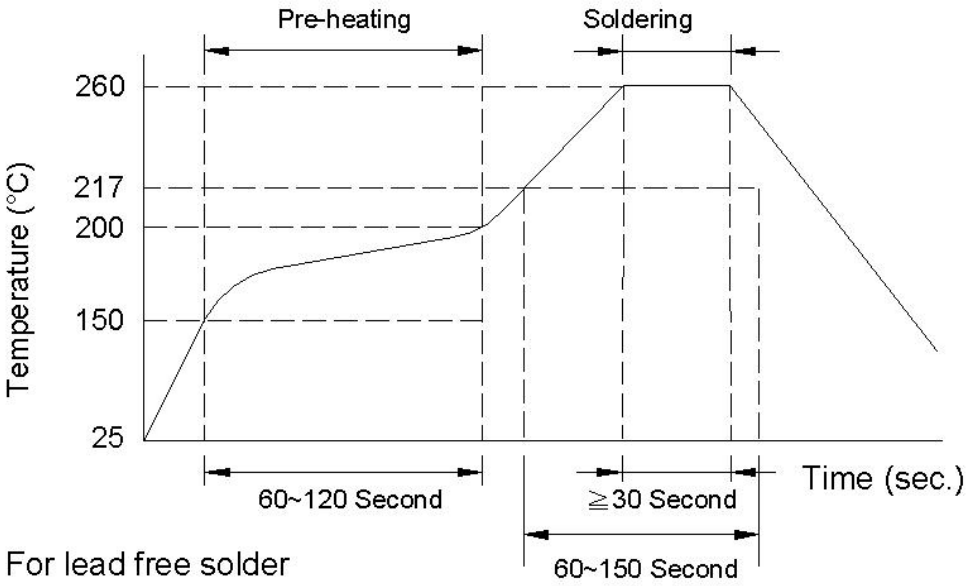
TYPE	2012
L	2.00±0.20
W	1.25±0.20
T	1.00±0.10
P	0.50±0.20
C1	0.25±0.20
C2	0.25±0.20
Unit: mm	

Recommended Land Pattern (mm)



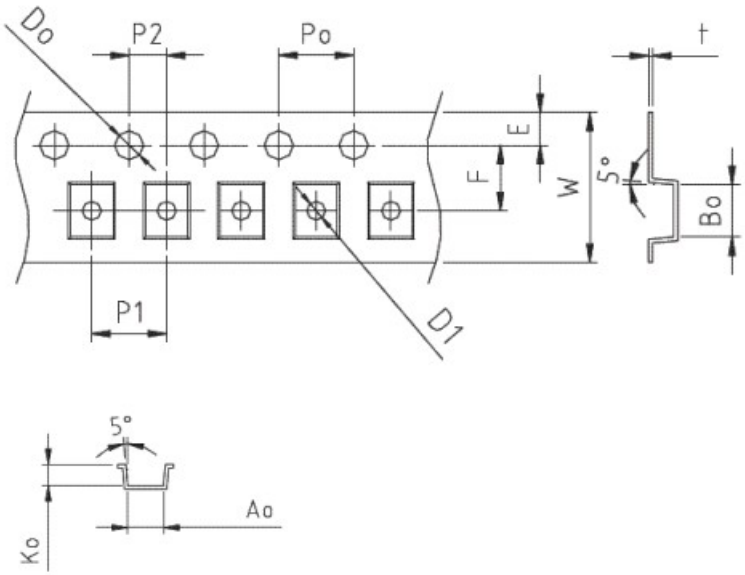
Symbol	A	B	C	D
Dimension	0.75	0.25	0.50	0.50

Recommended Reflow Profile



Test item	Test condition	Criteria
Thermal Shock	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 : 4hrs(MCA) Others : 8hrs C. Solder temperature : 235 ± 5℃ D. Flux : Rosin E. DIP time:5±1sec	More than 95 % of terminal electrode should be covered with new solder

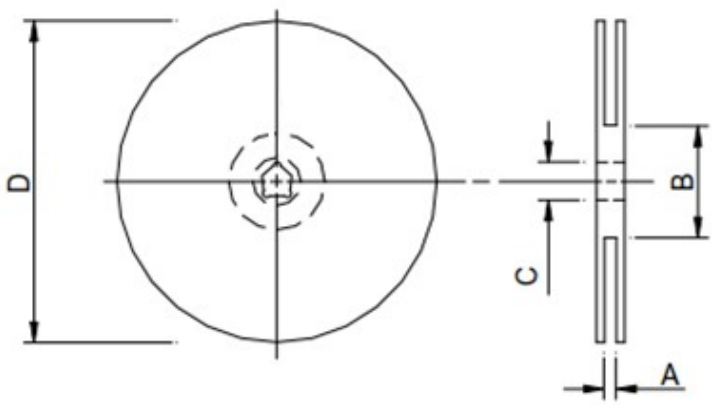
Type:Plastic Carrier



：mm

Symbol	Size	Symbol	Size
W	8.00±0.10	Po	4.00±0.10
P1	4.00±0.10	P2	2.00±0.10
E	1.75±0.10	Bo	2.25±0.10
F	3.50±0.10	Ao	1.40±0.10
Do	1.55±0.05	Ko	1.13±0.10
D1	1.00±0.05	t	0.22±0.05

REEL DIMENSIONS



Type	A(mm)	B(mm)	C(mm)	D(mm)
7”	10±1.5	50 or more	13.2±1.0	178±2.0