

Description

- ◆ 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

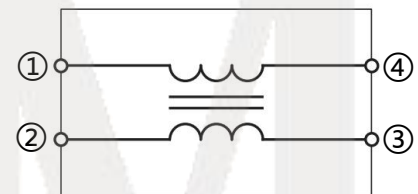


Features

- ◆ Size: 1.27mm*1.0mm*0.5mm
- ◆ Halogen free ,Lead free ,Reach and RoHs
- ◆ USB3.0/3.1,HDMI1.4/2.0,MIPI

Application

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



Circuit Diagram

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

Order information

Model	Marking	Package	shipping
CMF1210UD900MFR		1210	4000/Tape&Reel

Part Numbering

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

A:ASIM common mode filter

B:Dimension

C:Ordinary high speed differential signal(6GHz to 10GHz)

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

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

F:Type of electrode plating: F= Lead Free

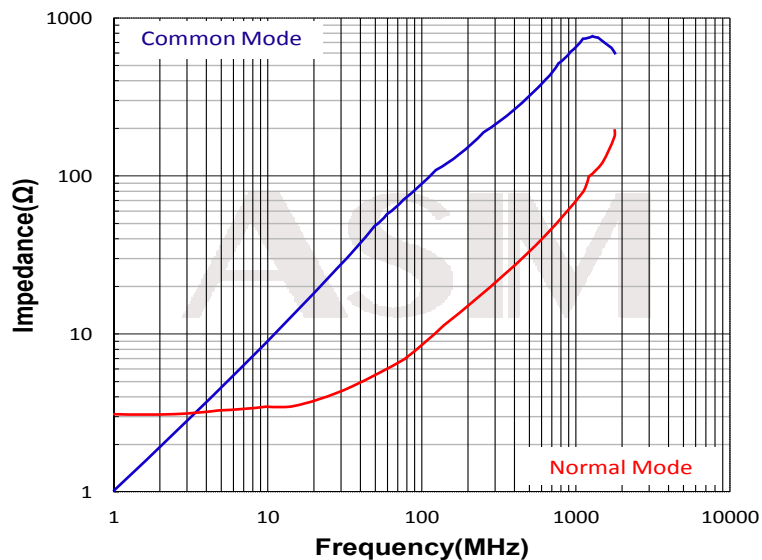
G:Packing Type, R= Reel

Specification

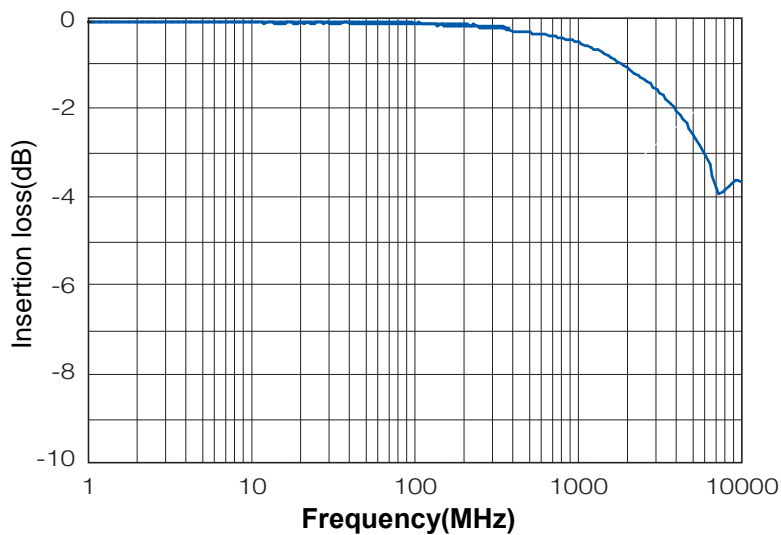
Part number	Common mode impedance(Ω) @100MHz	Rated Current (mA)	DC Resistance (Ω) max
CMF1210UD900MFR	90±20%	130	2.5
	Rated volt (Vdc)	Withstand volt (Vdc)	IR (Ω) min
	5	12.5	10M
	Operation junction temperature	Lead temperature	Storage temperature*
	-40°C~+85°C	260°C	-40°C~85°C

*The storage temperature is subject to the fixed substrate

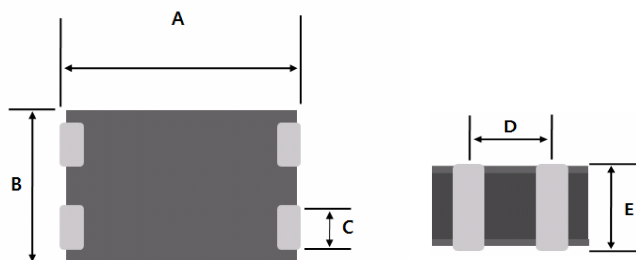
Performance Curves



Transmission Characteristics

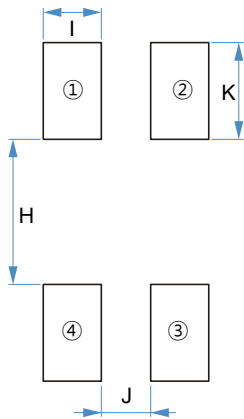


Dimension (mm)



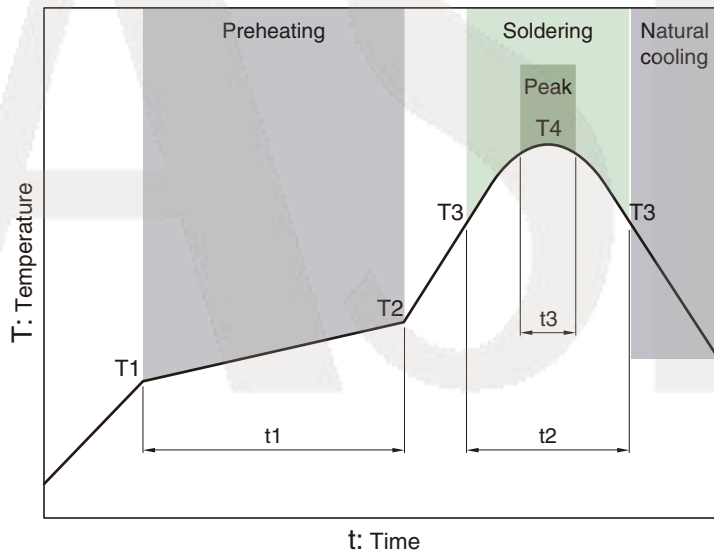
Symbol	A	B	C	D	E
Dimension	1.25±0.15	1.00±0.15	0.30±0.10	0.55±0.10	0.5±0.10

Recommended Land Pattern (mm)



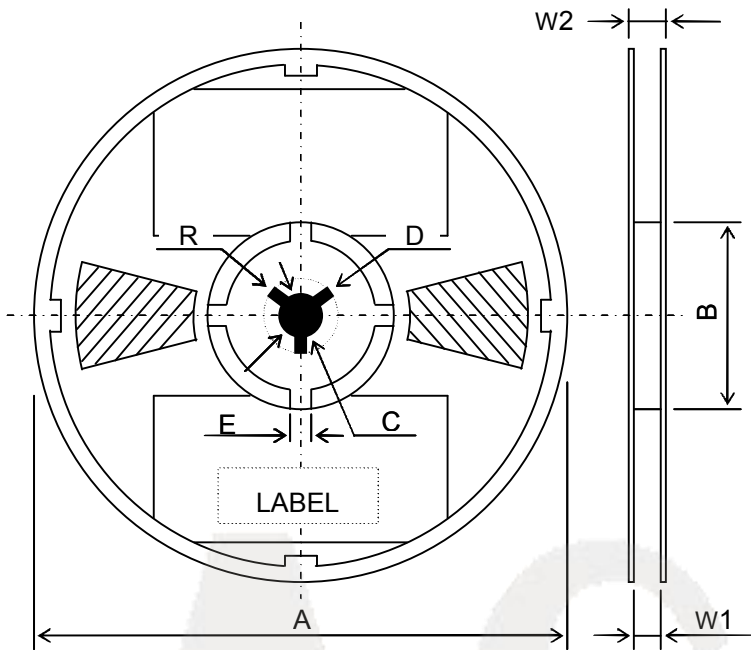
Symbol	H	I	J	K
Dimension	0.7	0.3	0.25	0.5

Recommended Reflow Profile

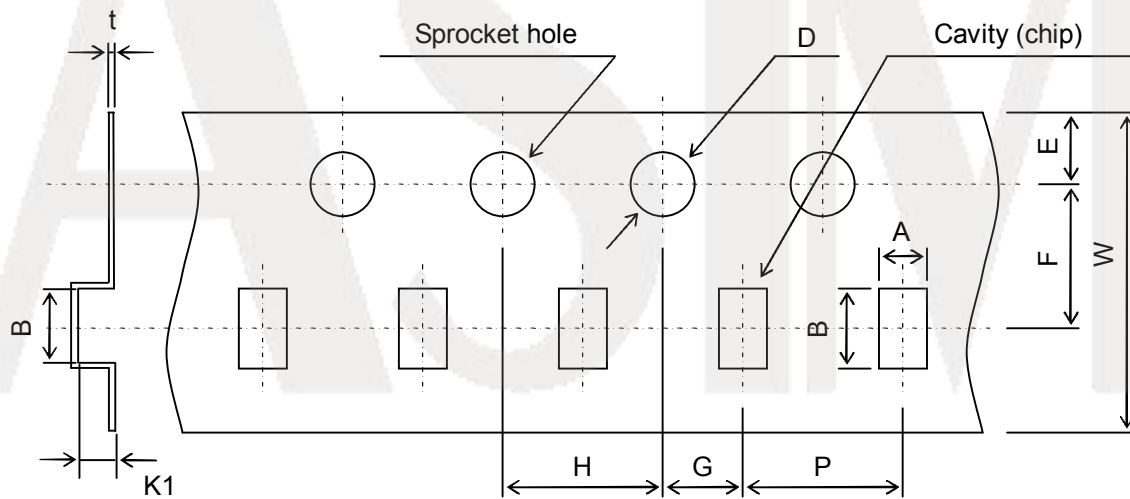


Preheating			Soldering		Peak	
Temp.	Temp.	Time	Temp.	Time	Temp.	Time
T1	T2	t1	T3	t2	T4	t3
150°C	180°C	60 to 120s	230°C	25 to 35s	250°C	5s

Reel Dimension & Tape Dimension (mm)



A	$\phi 180.0 \pm 2.0$
B	$\phi 60.0$ Min.
C	$\phi 13.0 \pm 0.2$
D	$\phi 21.0 \pm 0.8$
E	2.0 ± 0.5
W1	$8.4 + 2.0 / - 0$
W2	14.4 Max.
R	1.0



A	B	D	E	F	G	H	K1
$1.15 + 0.10$ $- 0.07$	$1.40 + 0.10$ $- 0.07$	$1.50 + 0.10 / 0$	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	0.65 ± 0.05
P	t	W	(Unit : mm)				
4.00 ± 0.10	0.25 ± 0.05	8.00 ± 0.20					