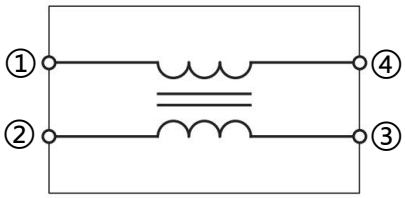
Desicription

- 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*1.2mm
- Halogen free ,Lead free ,Reach and RoHs



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	Marking	Package	shipping
CMF2012L025WAT		**2012**	**2000/Tape&Reel**

Part Numbering

CMF	2012	L025	W	A	T
A	B	C	D	E	F

A:ASIM common mode filter

B:Dimension

C:attenuation 25db

D:Wire wound

E:Shielding Type for 1.0 GHz

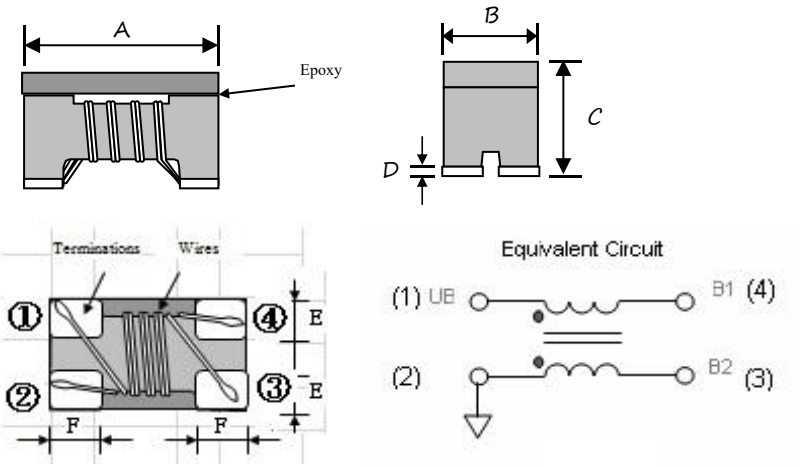
F:Tape

Specification

Part number	Freq. Range(MHz)	Port Impedance(Ω)	Insertion Loss(db)
CMF2012L025WAT	45~870	75~75	1.0 max
	CMRR (dB)	**Withstand volt (Vdc)**	**Rated volt (Vdc)**
	20.0 min	125	50
	DC Resistance (Ω) max	**Rated Current (mA)**	**IR (Ω) min**
	0.7	280	10M
	Operation junction temperature	**Lead temperature**	**Storage temperature***
	-40℃~+85℃	260℃	-40℃~85℃

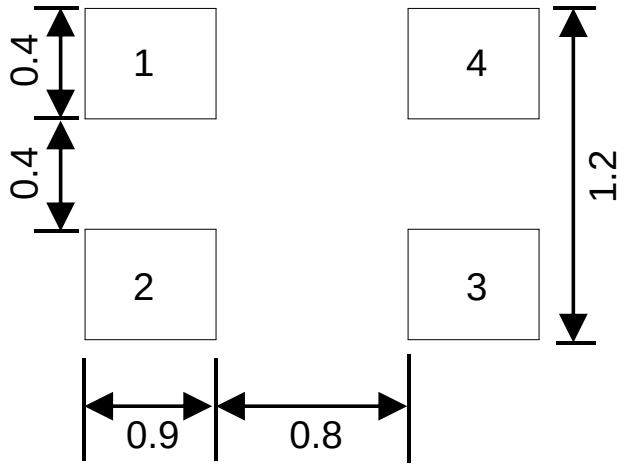
*The storage temperature is subject to the fixed substrate

PACKING DIMENSIONS (mm)



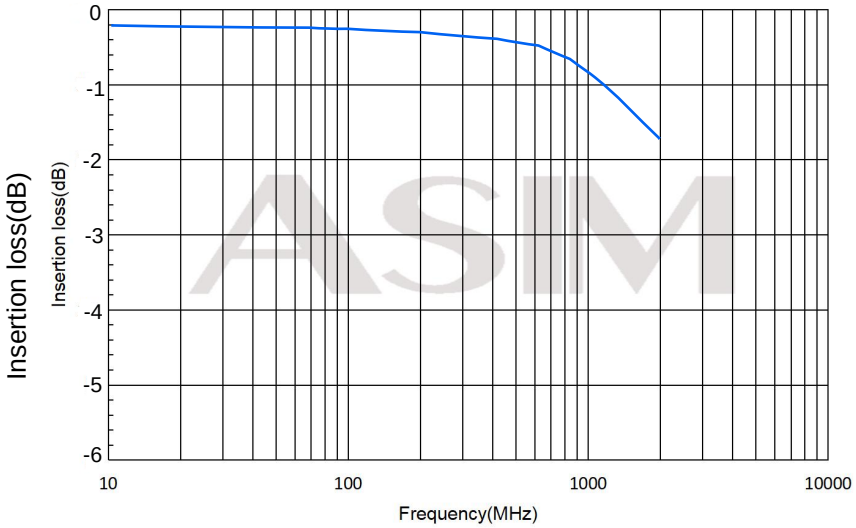
2012	Dimensions
A	2.0 ± 0.2
B	1.2 ± 0.2
C	1.2 ± 0.2
D	0.2 ± 0.1
E	0.40 Typ
F	0.45 Typ

Recommended Land Pattern (mm)

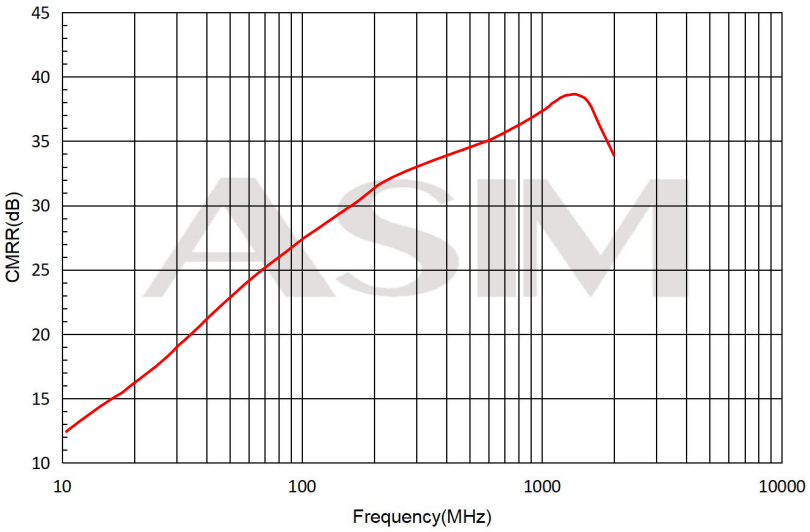


Recommended Reflow Profile

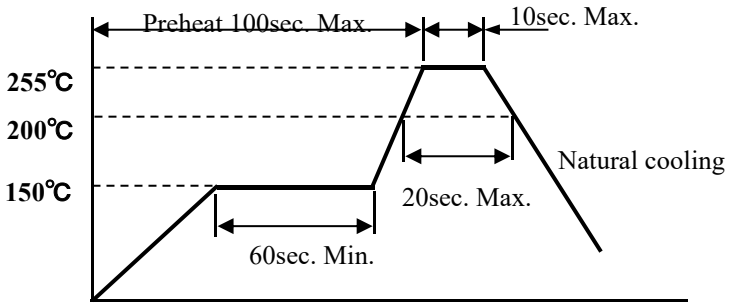
Insertion Loss Characteristics



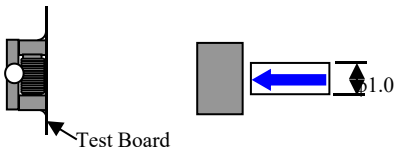
CMRR Characteristics



RECOMMENDED SOLDERING TEMP. GRAPH



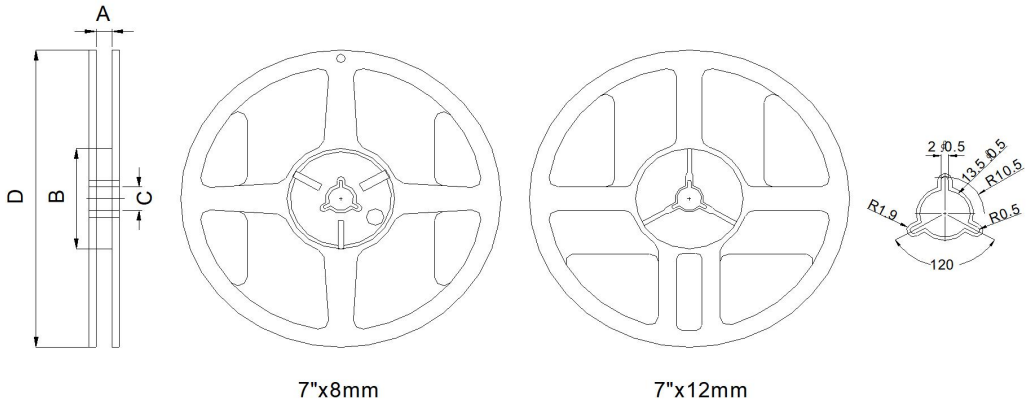
MECHANICAL RELIABILITY

TEST	Specification & Requirement	Method Used
Solderability	The surface of terminal/pin tested shall be covered with new solder by 90%	Solder heat proof: Preheating: 150 ±10℃ 60 seconds Soldering: 245 ±5℃ for 4 ±1 sec
Solder Heat Resistance	Components should have not evidence of electrical and mechannical damage Impedance:within ±15% of initial value	Preheating:150℃ 60secs Solder temperature: 260±5℃ Flux:rosin Dip time:10±0.5 secs
Terminal strength	Series No. / F（Kg） BT2012A-750 / 0.5	Solder a chip to test substrate and then laterally apply a force in the arrow direction 

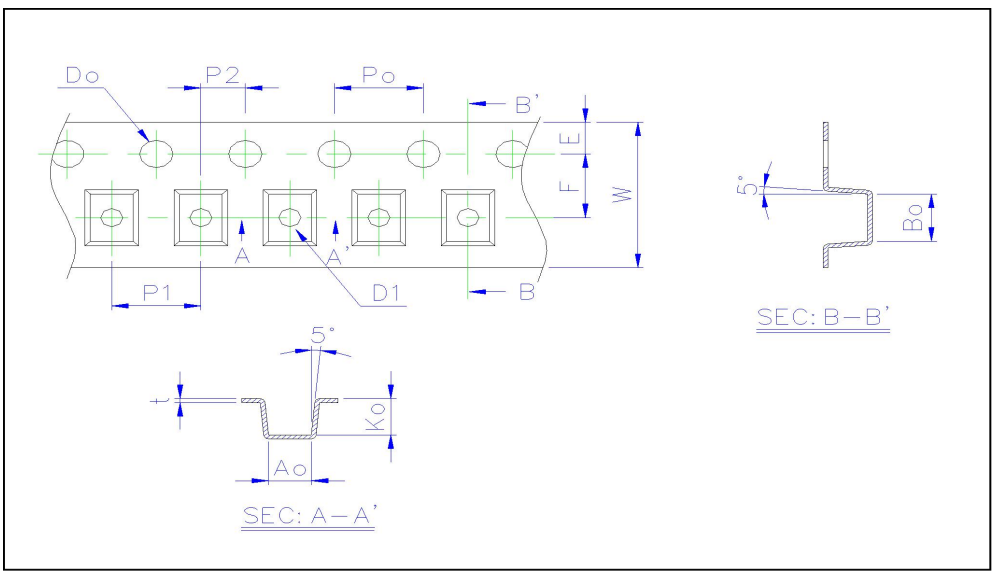
ENDURANCE RELIABILITY

TEST	Specification & Requirement	Method Used
Thermal Shock	Impedance change within ± 15% Without mechanical damage	-65℃, (30 mins) -> room temp. (2 mins) -> 125℃, (30 mins) -> room temp. (2 mins) 50 cycles
Humidity Resistance	Impedance change within ± 15% Without mechanical damage	Apply IDC current @ 60℃ ambient Humidity: 90% Duration: 168 hrs
Low Temp. Storing	Impedance change within ± 15% Without mechanical damage	Storing Temp. -40 ±2 ℃ for total 168 +5/-0 hours
High Temp. Storing	Impedance change within ± 15% Without mechanical damage	Storing Temp. 125 ±2 ℃ for total 168 +5/-0 hours

Reel Dimension & Tape Dimension



Type	A(mm)	B(mm)	C(mm)	D(mm)
7”x8mm	9.0±0.5	60±2	13.5±0.5	178±2



Size	Ao(mm)	Bo(mm)	Ko(mm)	W(mm)	E(mm)	F(mm)	Po(mm)	P1(mm)	Do(mm)
2012	2.35±0.10	1.50±0.10	1.45±0.10	8.00±0.20	1.75±0.10	3.50±0.05	4.0±0.05	4.0±0.10	1.0±0.1