



Common Mode Choke  
For ultra high-speed differential signal line

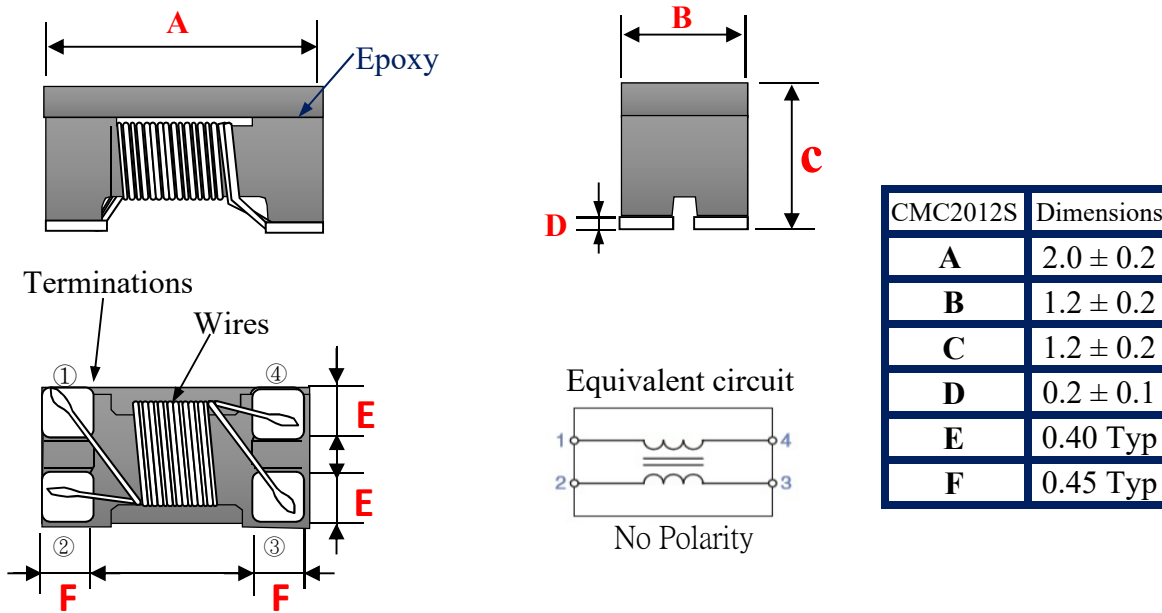
## CMC S-Series

## CMC2012S type

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CMC2012S [0805 inch]

## ◆ SHAPE & DIMENSIONS



## ◆ PART NUMBER CONSTRUCTION

<b>CMC</b>	<b>2012</b>	<b>S</b>	—	<b>900</b>	—	<b>2P</b>	—	<b>T</b>
Series name	L*W*T Dimensions (mm)	S type Cut-Off Frequency		Impedance (Ω)at100MHz		Number Of Line		Taping
Common Mode Choke	2.0*1.2*1.2	7.5GHz		120		2P 2lines		
				240				
				250				
				320				
				600				
				900				

## ◆ OPERATING TEMPERATURE RANGE, PACKAGE QUANTITY.

Type	Temperature range		Reel Dimensions (mm)	Package quantity (pieces/reel)
	Operating Temperature ℃	Storage Temperature ℃		
CMC2012S-Series	-40 to +85	-40 to +85	ø180	2,000



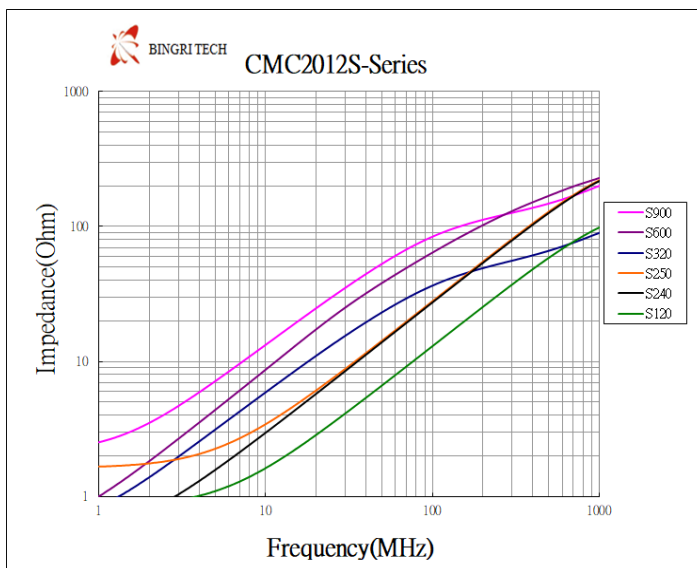
## ◆ ELECTRICAL CHARACTERISTICS

Impedance 100MHz (Ω)	DC Resistance (Ω) max.	Rated Voltage (V) max.	Insulation Resistance (MΩ)min.	Cut-Off Frequency	Rated Current (mA)max	Part No.
12±25%	0.25	50	10	7.5GHz	420	CMC2012S-120-2P-T
24±25%	0.25	50	10	7.5GHz	420	CMC2012S-240-2P-T
25±25%	0.22	50	10	7.5GHz	420	CMC2012S-250-2P-T
32±25%	0.25	50	10	7.5GHz	400	CMC2012S-320-2P-T
60±25%	0.30	50	10	7.5GHz	300	CMC2012S-600-2P-T
90±25%	0.30	50	10	7.5GHz	300	CMC2012S-900-2P-T

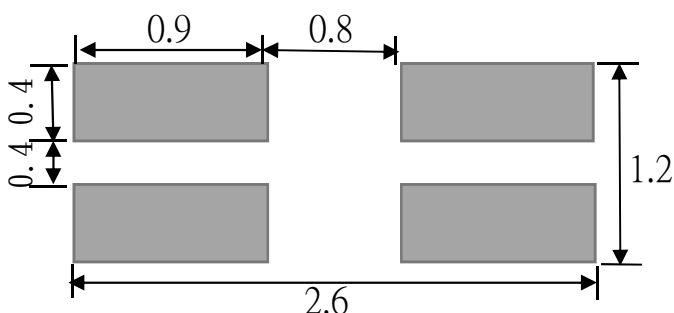
## ◆ Measurement Equipment

Measurement Item	Meter	Manufacturer
Common Mode Impedance	E4991A / 4287A	Agilent
DC Resistance	16502	Chroma
Insulation Resistance	4339B / 19073	Agilent / Chroma

## ◆ PERFORMANCE CURVES

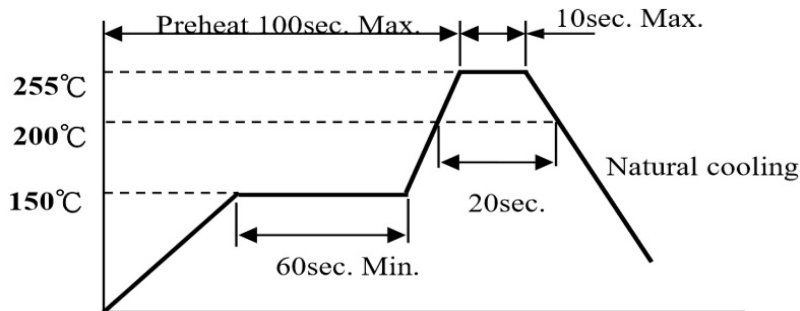


## ◆ Recommended Soldering Conditions (Please use this product by reflow soldering)



## ◆ RECOMMENDED REFLOW PROFILE

2017/11/1



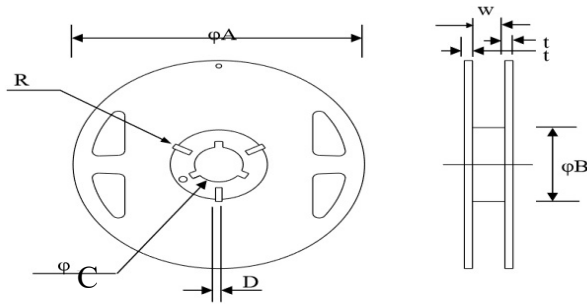
## ◆ MECHANICAL RELIABILITY

TEST ITEM	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°C 60 seconds Soldering: 245 ±5°C for 4 ±1 sec
Solder Heat Resistance	Components should have not evidence of Impedance: within ±15% of initial value	Preheating: 150°C 60secs Flux: rosin Dip time: 10±0.5 secs
Terminal strength	Series No.	F (Kg)
	2012	0.5
	2520	1.0
	3216	1.0
	3225	1.0
	4532	1.2

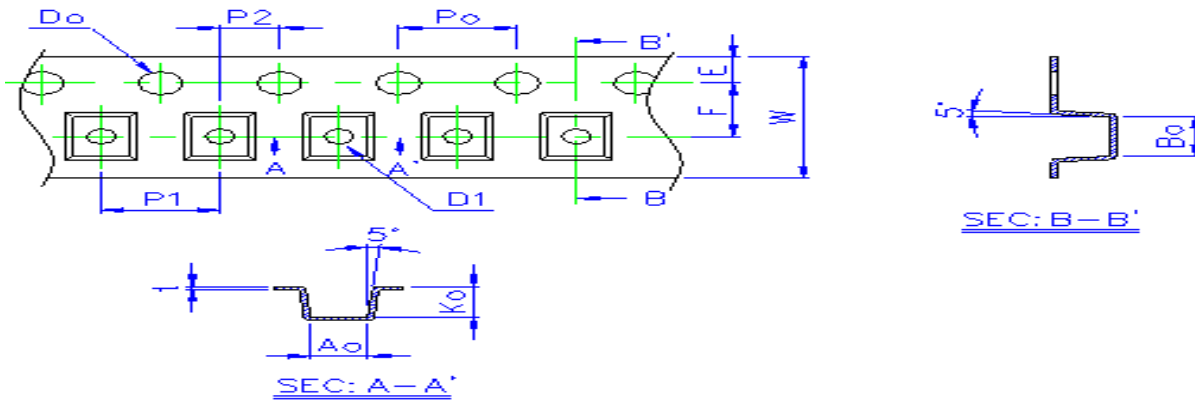
## ENDURANCE RELIABILITY

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

## ◆ Reel Dimension & Tape Dimension



Type	A(mm)	B(mm)	C(mm)	W(mm)
7"x8mm	178±1	60±0.5	13.5±0.5	9.5±0.5
7"x12mm	178±1	60±1	13.3±0.5	13.7±0.5



Size	A(mm)	Ao(mm)	B(mm)	Bo(mm)	Ko(mm)	W(mm)	E(mm)	F(mm)	Po(mm)	P1(mm)	P2(mm)	Do(mm)	D1(mm)
2012	77	1.50±0.1	500	2.35±0.1	1.45±0.1	8.00±0.2	1.75±0.1	3.50±0.05	4.00±0.05	4.00±0.1	2.00±0.05	1.50+0.1/-0	1.00±0.1

## ◆ Cover Tape Peel Strength

The force for tearing off cover tape is 0.05~0.69(N) in the arrow direction at the following conditions:

Temperature : 5 ~ 35°C

Humidity : 45 ~ 85%

Atmospheric pressure : 860 ~ 1060 hpa

