

Common Mode Choke

For High-Speed Differential Signal Line, General Differential Signal Line

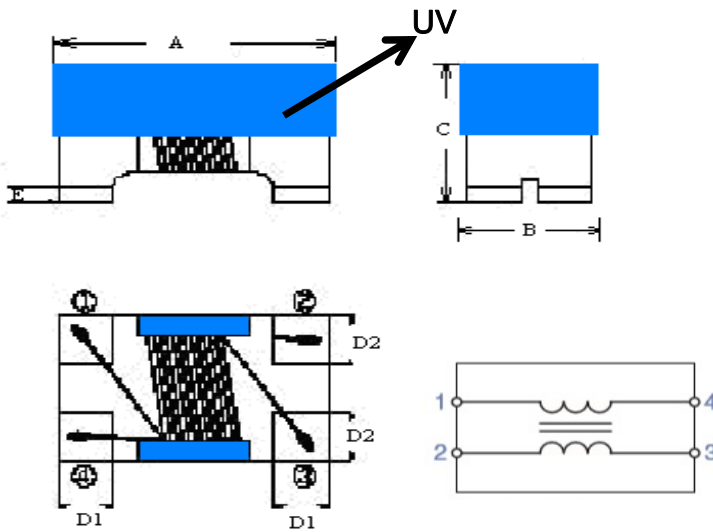
**CMU F-Series**

## CMU2012F type

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CMU2012F [0805 inch]

## ◆ SHAPE & DIMENSIONS



CMU2012F	Dimensions
<b>A</b>	2.1 +0.2/-0.1
<b>B</b>	1.2 +0.3/-0.0
<b>C</b>	1.0 +0.2/-0.1
<b>D1</b>	0.45
<b>D2</b>	0.4
<b>E</b>	0.17

Unit: mm

## ◆ PART NUMBER CONSTRUCTION

CMU	2012	F	—	900	—	2P	—	T
Series name	L*W*T Dimensions (mm)	F type Cut-Off Frequency		Impedance (Ω)at100MHz		Number Of Line		Taping
Common Mode Choke	2.0*1.2*1.0	1GHz		900		2P 2lines		
				121				
				181				

## ◆ OPERATING TEMPERATURE RANGE, PACKAGE QUANTITY.

Type	Temperature range		Reel Dimensions (mm)	Package quantity (pieces/reel)
	Operating Temperature °C	Storage Temperature °C		
CMU2012F-Series	-40 to +85	-40 to +85	ø180	2,000

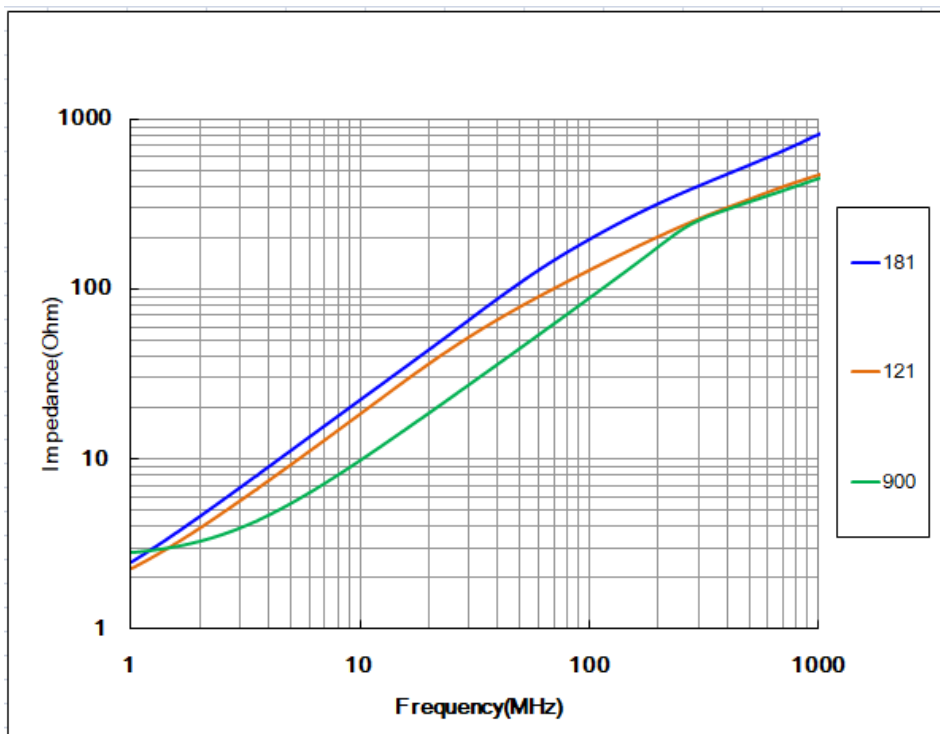
## ◆ ELECTRICAL CHARACTERISTICS

Impedance 100MHz ( $\Omega$ )	DC Resistance ( $\Omega$ ) max.	Rated Voltage (V) max.	Insulation Resistance (M $\Omega$ )min.	Rated Current (mA)max.	Part No.
90 $\pm$ 25%	0.35	50	10	250	CMU2012F-900-2P-T
120 $\pm$ 25%	0.35	50	10	250	CMU2012F-121-2P-T
180 $\pm$ 25%	0.50	50	10	250	CMU2012F-181-2P-T

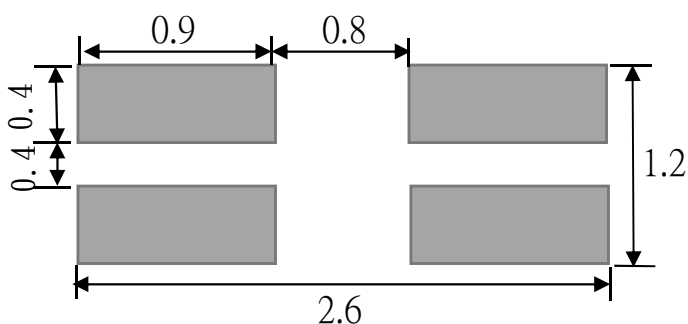
## ◆ Measurement Equipment

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

## ◆ PERFORMANCE CURVES

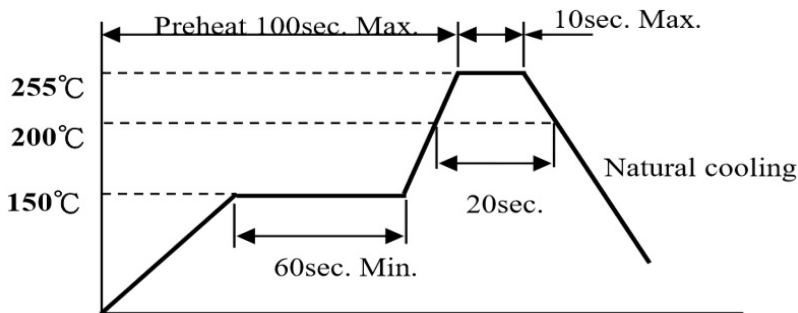


## ◆ Recommended Soldering Conditions (Please use this product by reflow soldering)



## ◆ RECOMMENDED REFLOW PROFILE

2019/3/19



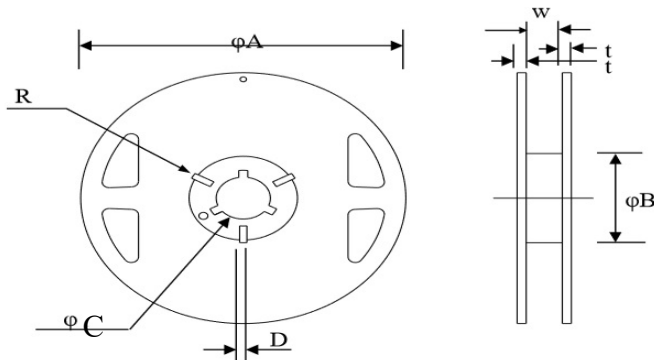
## ◆ MECHANICAL RELIABILITY

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, Solder temperature: 260 ± 5°C 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

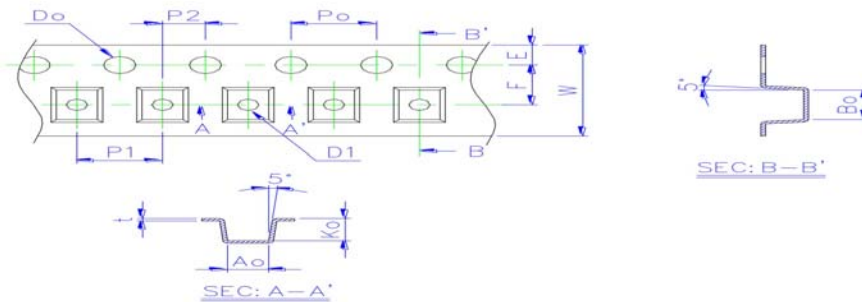
## ENDURANCE RELIABILITY

Thermal Shock	Impedance change within ± 15% Without mechanical damage	-40 ± 3°C (30min) --> room temp. ( 3mins ) 85 ± 3°C (30min) --> room temp. (3mins ) 10 cycles
Humidity Resistance		Temperature: 40 ± 5°C Humidity: 90 to 95% Rated current Time: 500 ± 12 hr.
Low Temp. Storing		Storing Temp. Temperature: -40 ± 5°C, Time: 500 ± 12 hr.
High Temp. Storing		Storing Temp. Temperature: 85 ± 5°C, Time: 500 ± 12 hr.

## ◆ 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

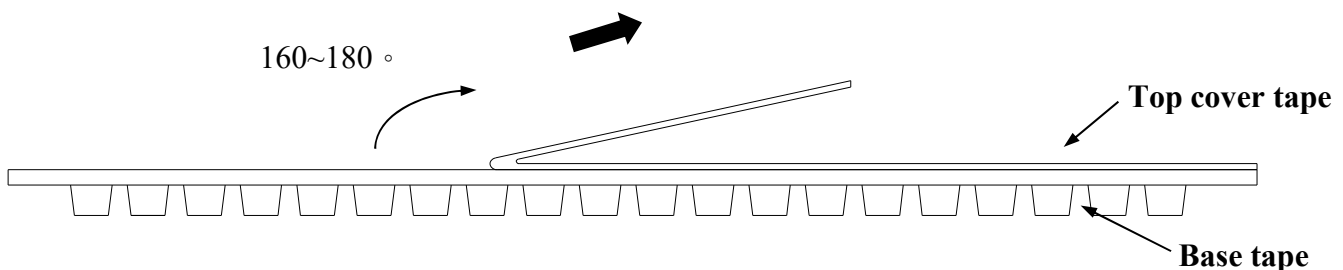
## ◆ Cover Tape Peel Strength

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



## ◆ Packaging Quantity

Chip Size	2012
8mm / Reel	2000