



Common Mode Choke

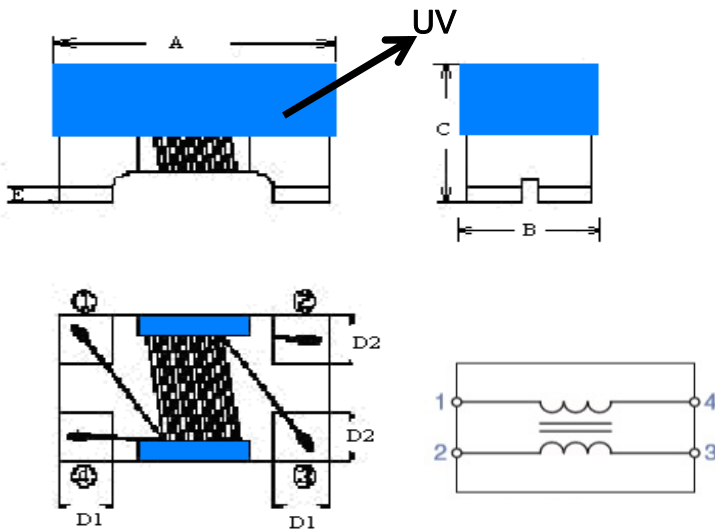
For High-Speed Differential Signal Line, General Differential Signal Line

CMU F-Series

CMU2012F type

CMU2012F [0805 inch]

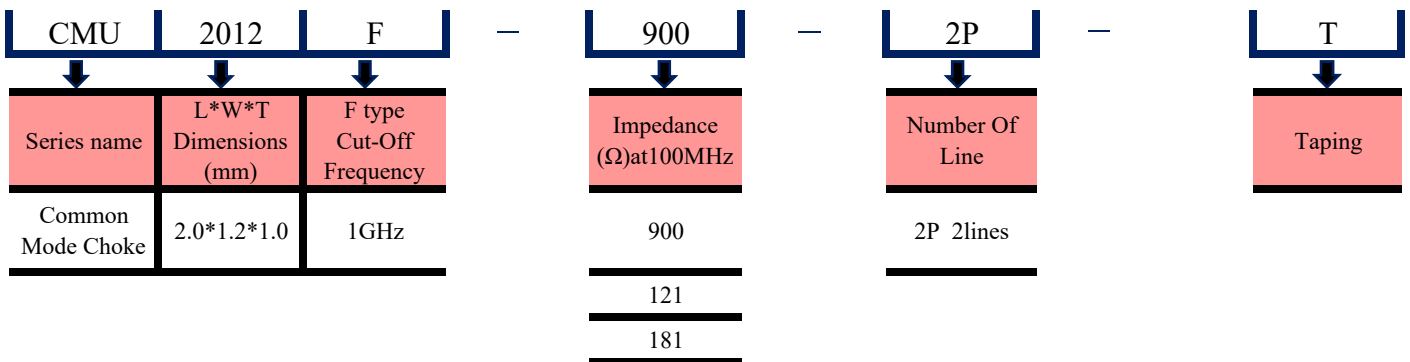
◆ SHAPE & DIMENSIONS



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

Unit: mm

◆ PART NUMBER CONSTRUCTION



◆ 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

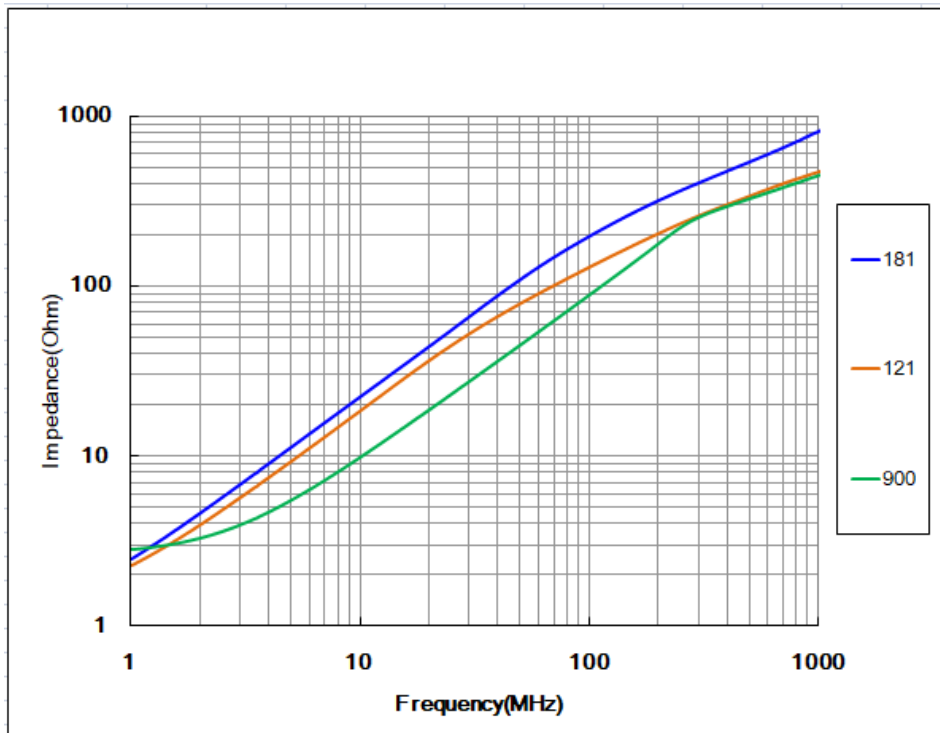
◆ ELECTRICAL CHARACTERISTICS

Impedance 100MHz (Ω)	DC Resistance (Ω) max.	Rated Voltage (V) max.	Insulation Resistance (M Ω)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

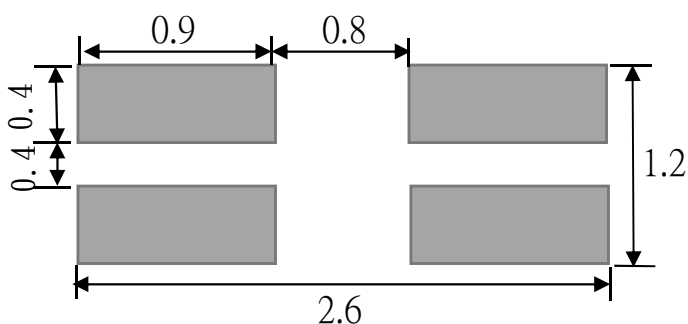
◆ Measurement Equipment

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

◆ PERFORMANCE CURVES



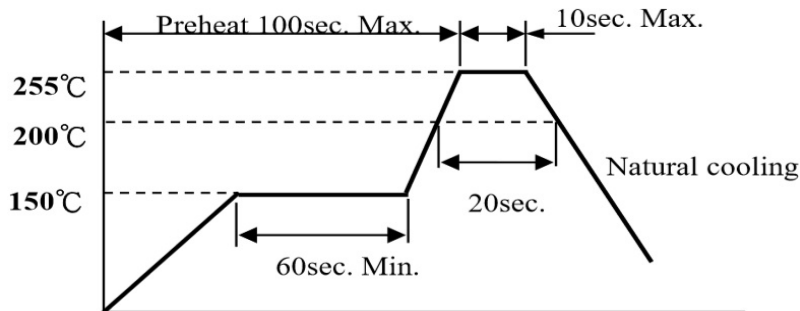
◆ Recommended Soldering Conditions (Please use this product by reflow soldering)



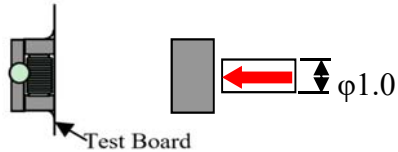


◆ RECOMMENDED REFLOW PROFILE

2019/3/19



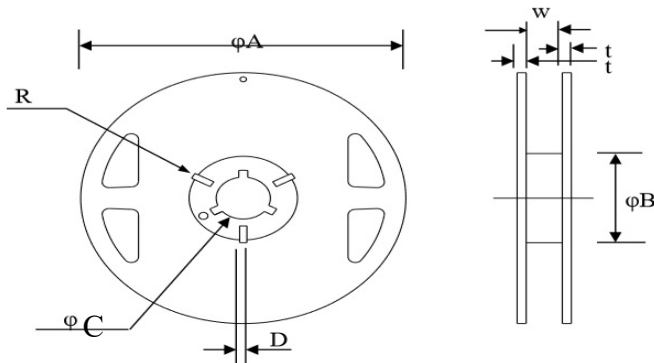
◆ MECHANICAL RELIABILITY

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)	Solder a chip to test substrate and then laterally apply a force in the arrow direction 
	CMC/CMU/2012F	0.5	
	CMC/P3216F	1.0	
	CMC/P3225F	1.0	
	CMC/P4532F	1.2	

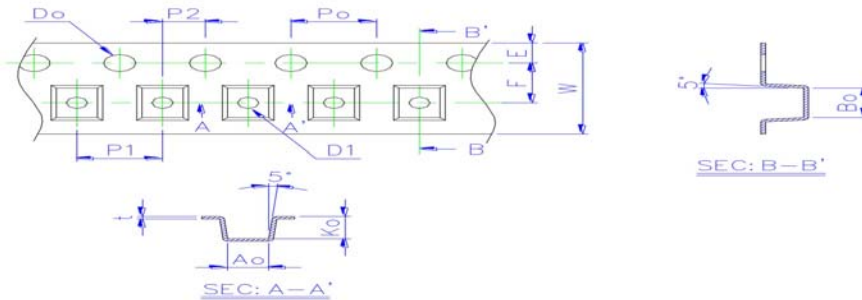
ENDURANCE RELIABILITY

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	Ao(mm)	Bo(mm)	Ko(mm)	W(mm)	E(mm)	F(mm)	Po(mm)	P1(mm)	Do(mm)
2012	1.50±0.05	2.35±0.05	1.45±0.05	8.00±0.20	1.75±0.10	3.50±0.05	4.00±0.05	4.00±0.10	1.50+0.10/-0.00

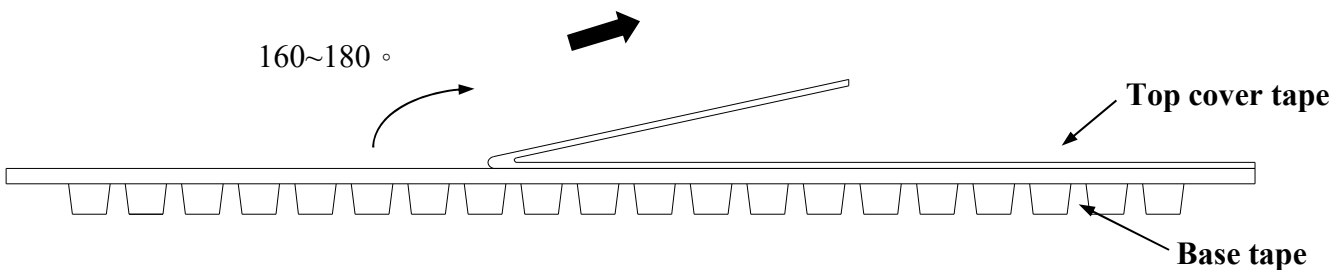
◆ Cover Tape Peel Strength

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