Wire Wound Common Mode Filter
SCMM3216F Series

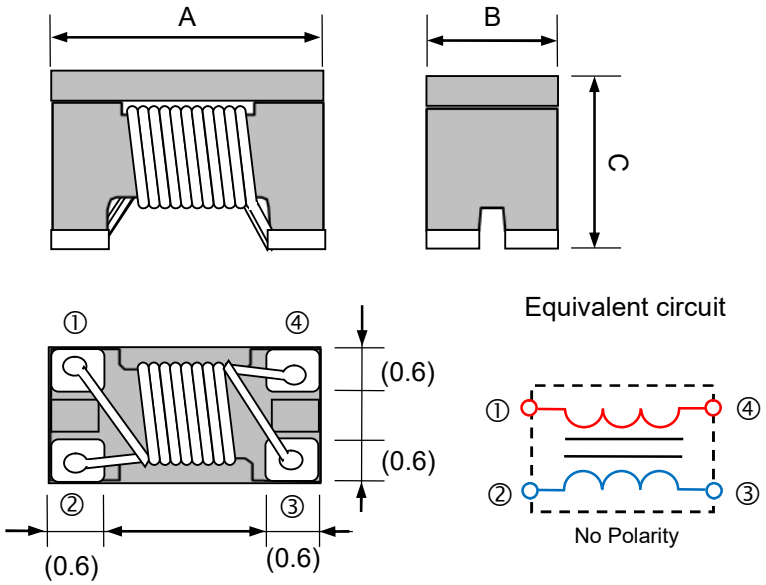
■ Feature

- High common mode impedance at high frequency effects excellent noise suppression performance.
- SCMM series realizes small size and low profile.

■ Application

- Common mode noise suppression of signal lines in high speed and high density digital equipment such as personal computers and peripherals.

■ SHAPES AND DIMENSIONS



Dim.	Unit: mm (inch)
A	3.2 ± 0.2 (0.126 ± 0.008)
B	1.6 ± 0.2 (0.063 ± 0.008)
C	1.9 ± 0.2 (0.075 ± 0.008)

■ PART NUMBER CODE

SCMM	3216	F	-	900	-	2P	-	A
1		2		3		4		5		6

1. Series Name
2. Size Code
3. Identification Code： F= USB 2.0, IEEE1394 or LVDS etc.
4. Impedance at 100MHz (R=Decimal Point) Unit：Ω ; 900=90Ω
5. Number of Line：2P：2-Line
6. Soldering：A=Lead free

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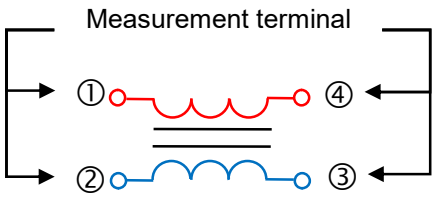
■ ELECTRICAL CHARACTERISTICS

1. TEST EQUIPMENT

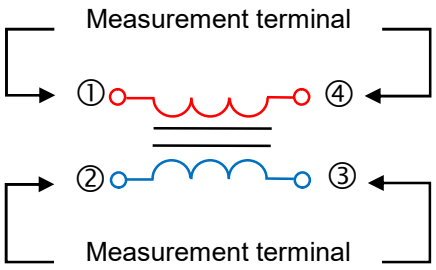
1.1. Impedance：

Measured by using Agilent E4991A RF Impedance Analyzer.



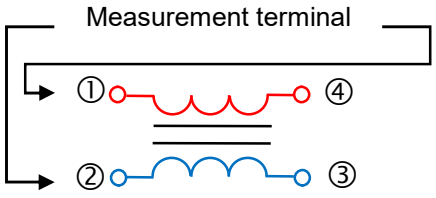
1.2. DC Resistance

Measured by Chroma 16502 mill ohm meter.



1.3. Insulation Resistance

Measured by Chroma 19073
Measurement voltage : 50V. Measurement time: 60 sec.



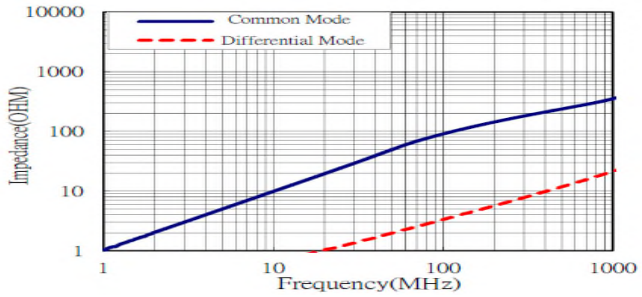
1.4. Operating temperature range from -25℃ to 85℃

2. Part Number and Characteristics Table

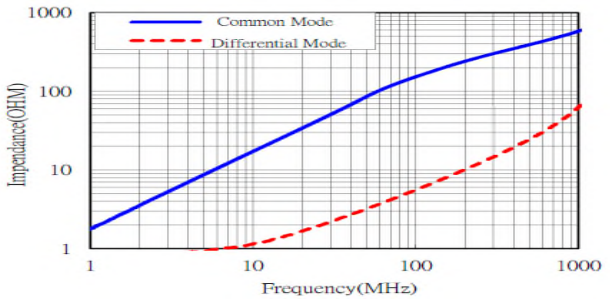
Part Number	Common-Mode Impedance Z(Ω) at 100MHz	DC Resistance Rdc(Ω) Max.	Rated Current Idc(mA) Max.	Rated Voltage Vdc(V)	Withstand Voltage Vdc(V)	Insulation Resistance (MΩ)Min.
SCMM3216F-900-2P-A	90 ±25%	0.30	400	50	125	10
SCMM3216F-161-2P-A	160±25%	0.40	350	50	125	10
SCMM3216F-261-2P-A	260±25%	0.50	310	50	125	10
SCMM3216F-601-2P-A	600±25%	0.80	260	50	125	10
SCMM3216F-102-2P-A	1000±25%	1.00	230	50	125	10
SCMM3216F-222-2P-A	2200±25%	1.20	200	50	125	10

3. CHARACTERISITICS (REFERENCE)

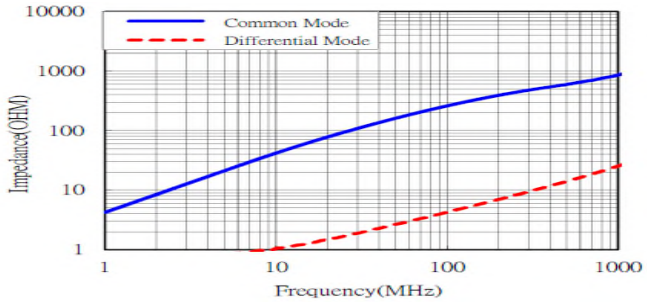
SCMM3216F-900-2P-A



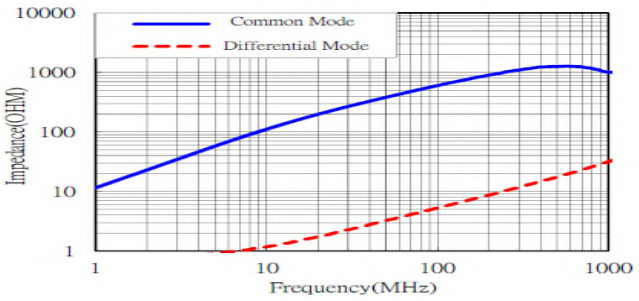
SCMM3216F-161-2P-A



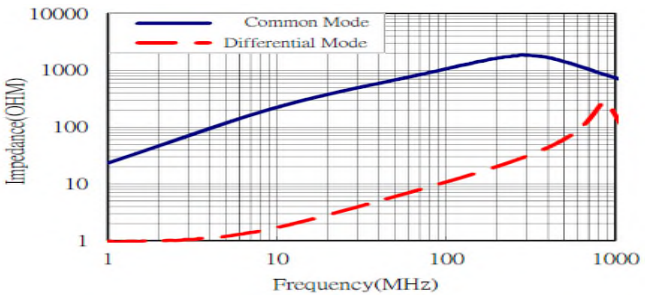
SCMM3216F-261-2P-A



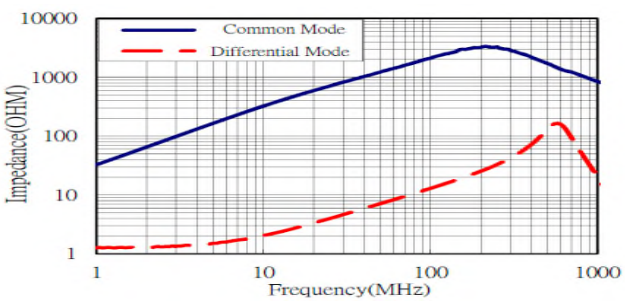
SCMM3216F-601-2P-A



SCMM3216F-102-2P-A



SCMM3216F-222-2P-A



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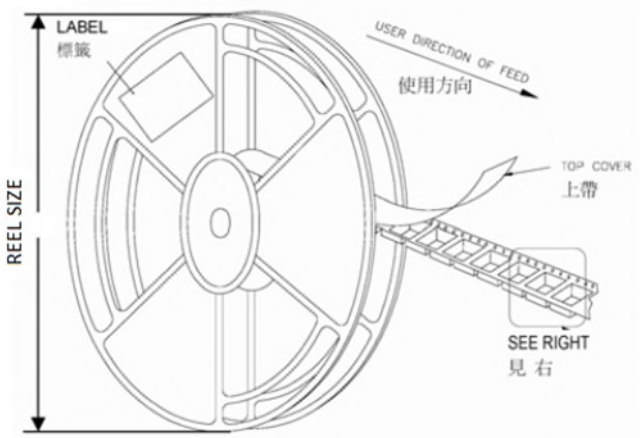
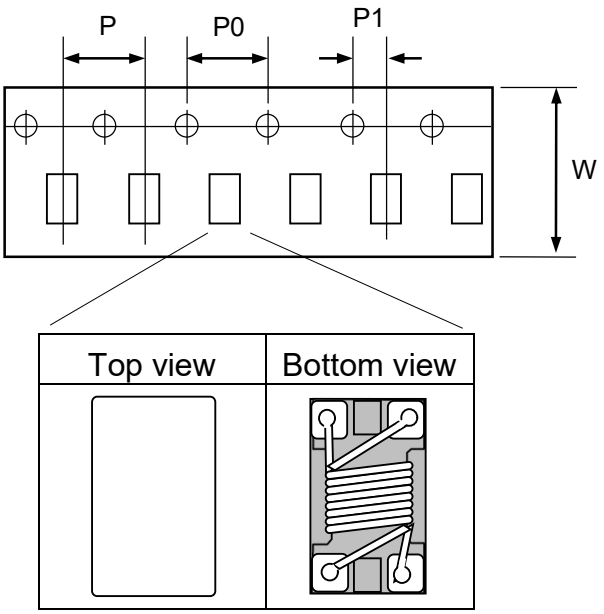
■ REEL DIMENSIONS





REEL PACKAGING QUANTITY

Unit: mm

TYPE	W	P	P0	P1	REEL SIZE	PCS / REEL
SCMM3216F	8	4	4	2	180 mm (7”)	2000

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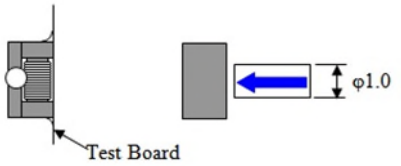
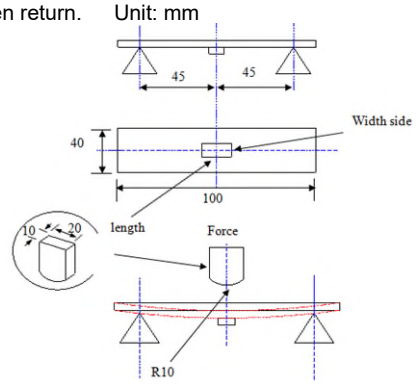
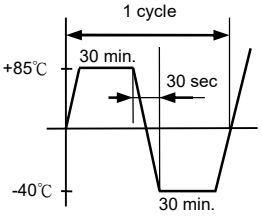
■ RELIABILITY AND TEST CONDITION

Item	Specifications	Test Conditions
Solderability	It can be connected on the Recommendation soldering condition.	Apply cream solder to the test circuit board. It is mounted on the recommendation soldering condition.
Terminal strength	The terminal electrode and the ferrite must not be damaged.	Solder a chip to test substrate, and then laterally apply a load 7.5N in the arrow direction. 
Strength on pc board bending	The terminal electrode and the ferrite must not be damaged.	Soldering a chip to a test substrate, bend the substrate by 2mm and then return. Unit: mm  Test board : Glass base epoxy multiplayer board pc board pattern. PC board pattern : Recommended PC board pattern.
High temperature resistance	Appearance: Ferrite shall not be damaged. Impedance: Within ±20% of the initial value. Insulation resistance: >10(MΩ) DC resistance: standard value inside.	Temperature : +85±2℃ Applied voltage : Rated voltage Applied current : Rated current Testing time : 500±12 hours Measurement : After placing for 24 hours min.
Humidity resistance		Temperature : +85±2℃ Humidity : 90 to 95%RH Applied voltage : Rated voltage Applied current : Rated current Testing time : 500±12 hours Measurement : After placing for 24 hours min.
Thermal shock		Temperature : -40℃ ,+85℃ kept stabilized for 30 minutes each. Cycle : 100 cycle Measurement: After placing for 24 hours min. 
Low temperature storage		Temperature : -40±2℃ Testing time : 500±12 hours Measurement : After placing for 24 hours min.
Vibration	Appearance: Ferrite shall not be damaged.	Frequency : 10 to 50 Hz Amplitude : 1.52mm Dimension and times : X ,Y and Z directions for 2 hours each

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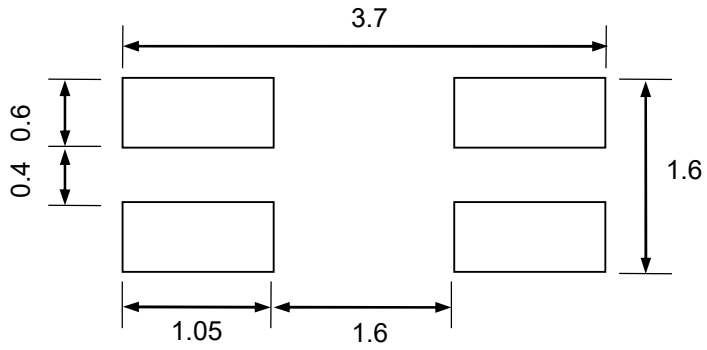
■ RECOMMENDED SOLDERING CONDITIONS

Please use this product by reflow soldering

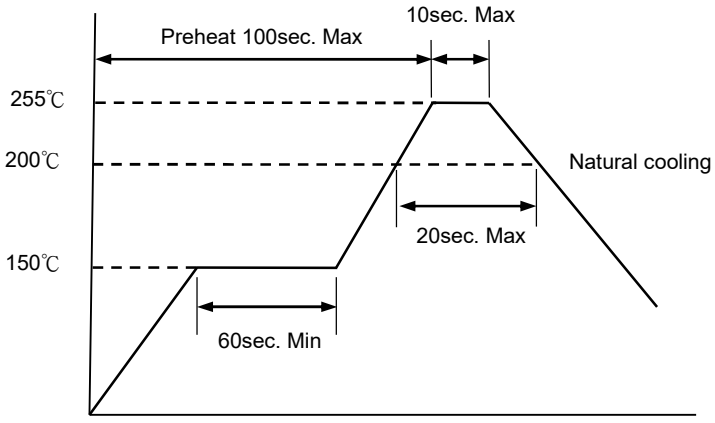
1. Recommended Footprint

Termination Number : Please refer to the equivalent circuit in page 2.



2. Recommended Reflow Pattern

Reflow : until two times



3. Iron Soldering

Use a solder iron of less than 30W when soldering ,do not allow the soldering iron tip directly touch the ferrite body outside of terminal electrode.
2 seconds max. at 280℃.

4. Attention in Case of Using

In case of using product ,please avoid following matters:

Splashing water or salt water
Dew condenses
Toxic gas (Hydrogen sulfide, Sulfurous acid ,Chlorine, Ammonia)
Vibrations or shocks which exceed the specified condition

Please be careful for the stress to this product by board flexure or something after the mounting.

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