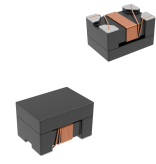


FEATURES

- Winding type realizes small size and low profile
- Prevention of common mode noise at high frequency
- Excellent solderability
- Operating temperature -40~+125℃ (Including self - temperature rise)


APPLICATIONS

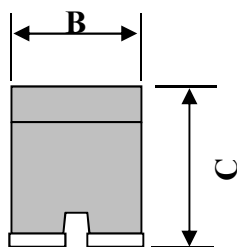
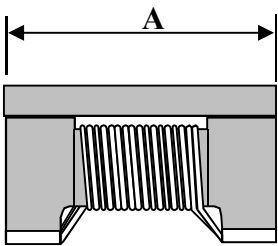
- USB2.0 of PC, peripheral equipments, small digital AV equipments, etc.
- LVDS lines of Note PC, LCD
- Audio lines

Explanation of Part Number

ACM 2012 -2P- 900 T F

1 2 3 4 5 6

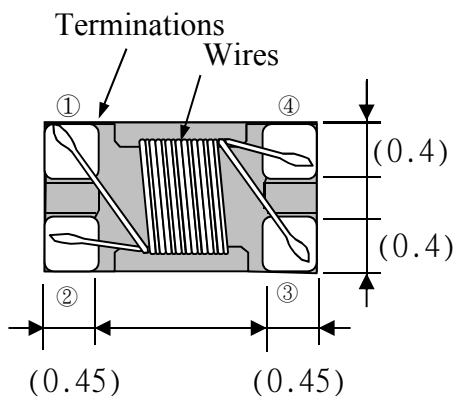
- ◆ 1:Product Series:Wire Wound Chip Common Mode Filters
- ◆ 2:Dimensions:
- ◆ 3: Number of Lines 2P=2 lines
- ◆ 4:Common Mode Impedance(Ω)
- ◆ 5:Packing(Tape & Reel)
- ◆ 6:F:Hazardous Substance Free Products

Shapes and Dimensions [Dimensions in mm]


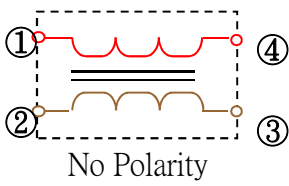
A : 2.0 ± 0.2

B : 1.2 ± 0.2

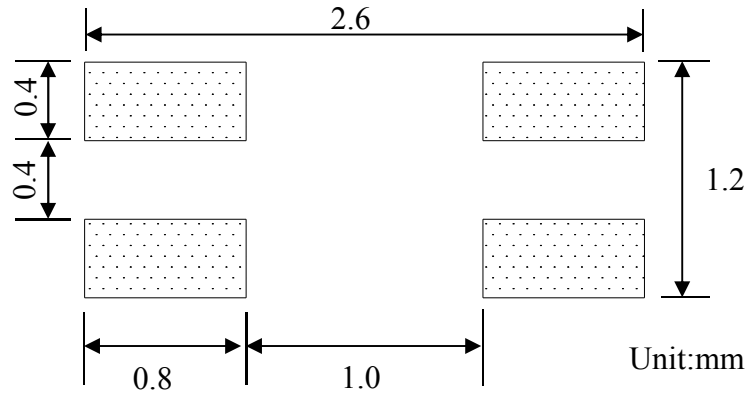
C : 1.2 ± 0.2



Equivalent circuit



Land Pattern: [mm]

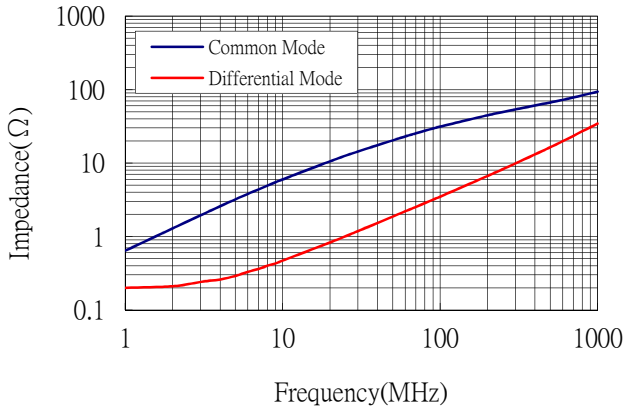


Electrical Characteristics:

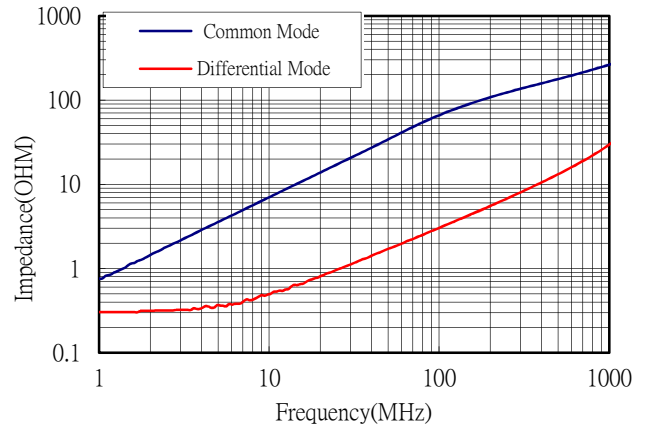
Part Number	Common-Mode Impedance $Z(\Omega)$ at 100MHz	DC Resistance $R_{dc}(\Omega)$ Max.	Rated Current $I_{dc}(mA)$ Max.	Rated Voltage $V_{dc}(V)$	Insulation Resistance $(M\Omega)$ Min.	Withstand Voltage $V_{dc}(V)$
ACM2012-2P-300TF	30 ±25%	0.20	450	50	10	125
ACM2012-2P-670TF	67 ±25%	0.25	400	50	10	125
ACM2012-2P-900TF	90 ±25%	0.30	400	50	10	125
ACM2012-2P-121TF	120±25%	0.30	370	50	10	125
ACM2012-2P-161TF	160±25%	0.35	350	50	10	125
ACM2012-2P-181TF	180±25%	0.35	330	50	10	125
ACM2012-2P-201TF	200±25%	0.40	300	50	10	125
ACM2012-2P-221TF	220±25%	0.40	300	50	10	125
ACM2012-2P-261TF	260±25%	0.40	300	50	10	125
ACM2012-2P-361TF	360±25%	0.45	280	50	10	125
ACM2012-2P-601TF	600±25%	0.55	200	50	10	125
ACM2012-2P-671TF	670±25%	0.60	150	50	10	125
ACM2012-2P-801TF	800±25%	0.80	150	50	10	125
ACM2012-2P-901TF	900±25%	0.80	150	50	10	125
ACM2012-2P-102TF	1000±25%	1.30	150	50	10	125
ACM2012-2P-222TF	2200±25%	2.00	100	50	10	125

Typical Electrical Characteristics:

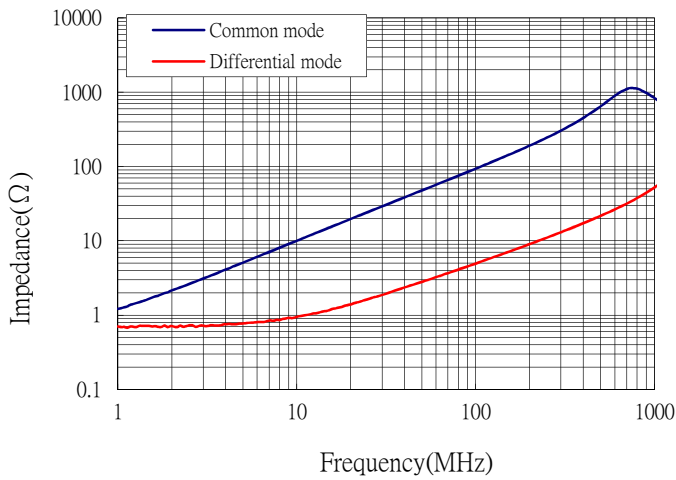
ACM2012-2P-300TF



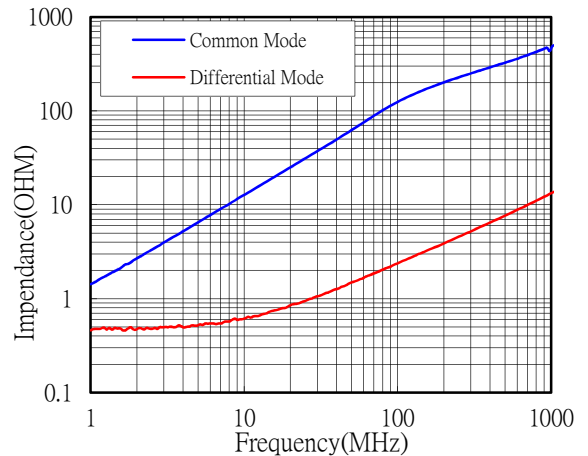
ACM2012-2P-670TF



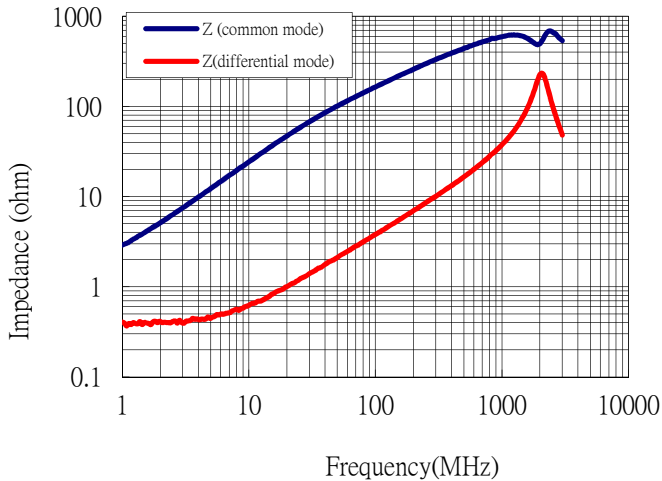
ACM2012-2P-900TF



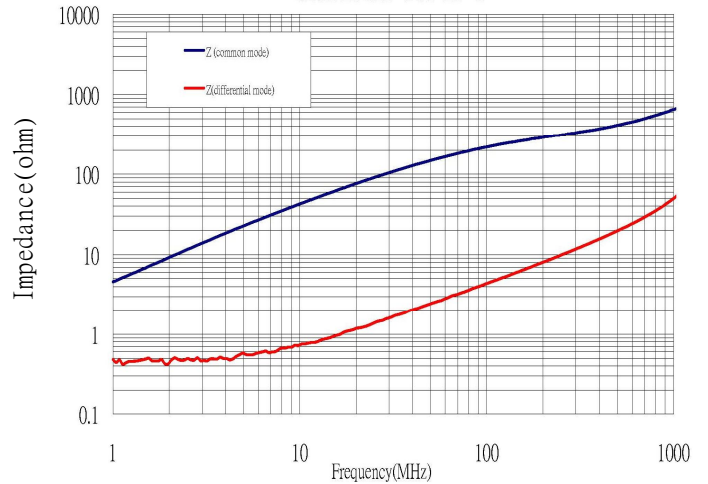
ACM2012-2P-121TF

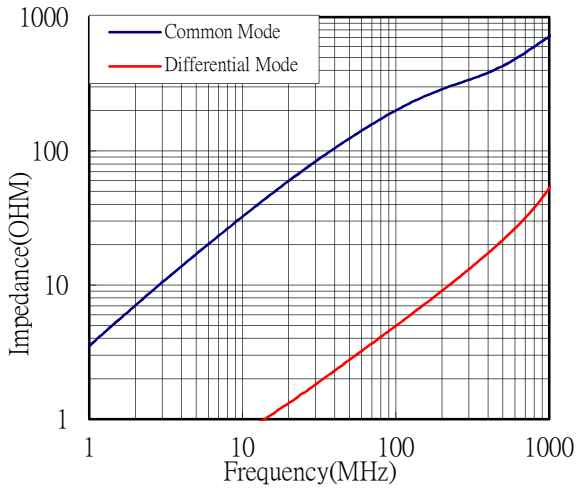
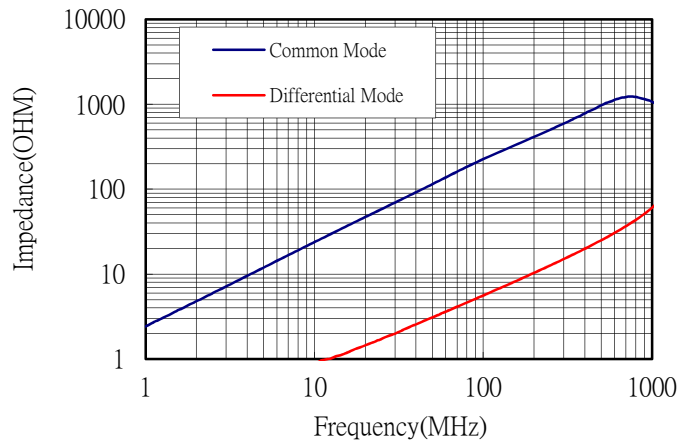
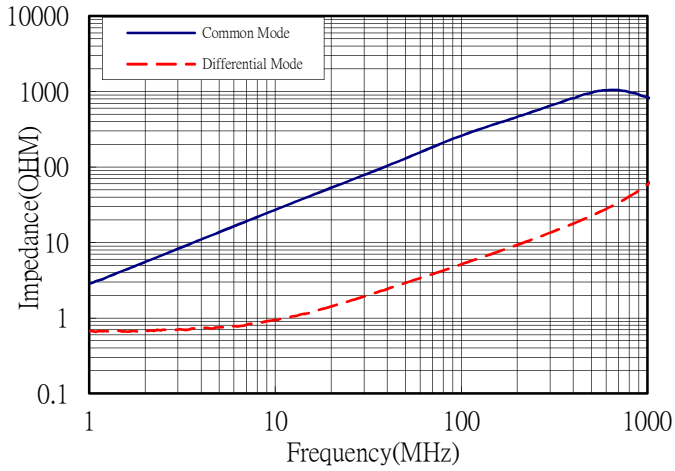
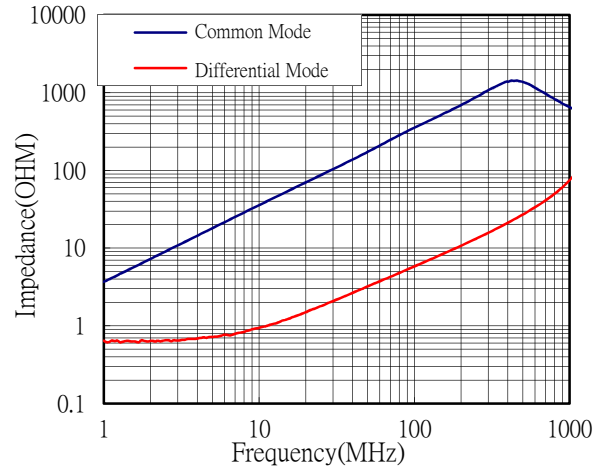
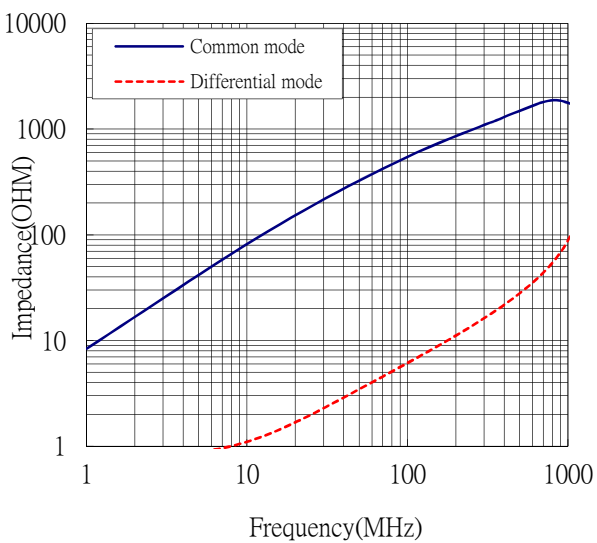
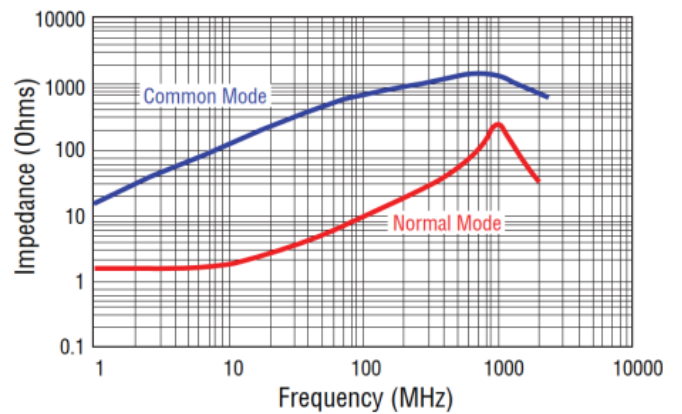


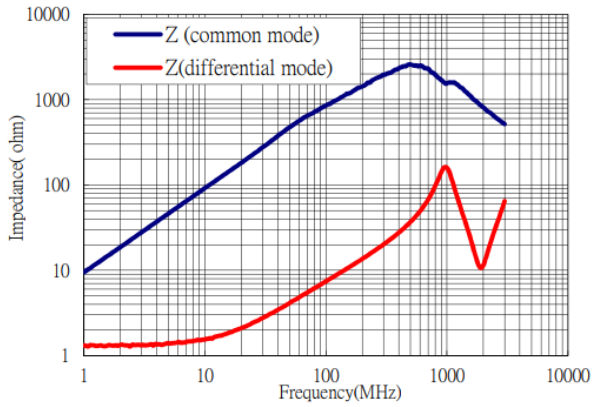
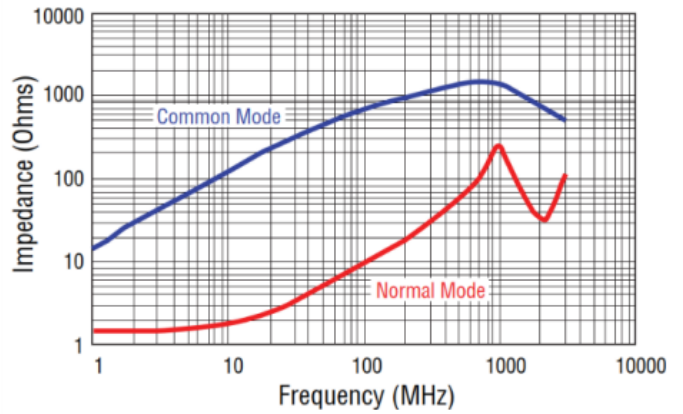
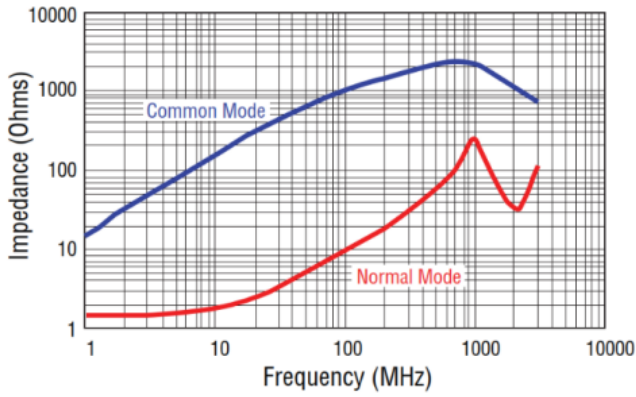
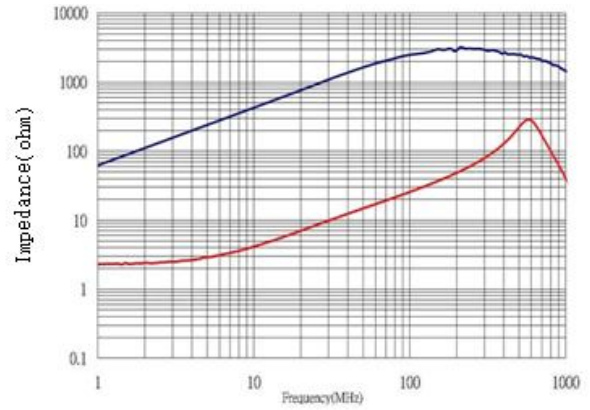
ACM2012-2P-161TF



ACM2012-2P-181TF



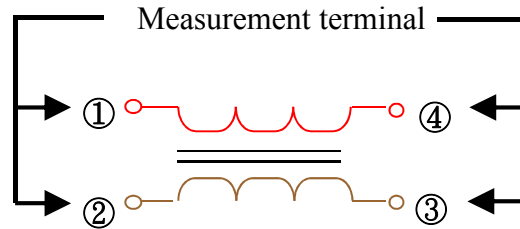
ACM2012-2P-201TF

ACM2012-2P-221TF

ACM2012-2-261T03

ACM2012-2-361T028

ACM2012-2P-601TF

ACM2012-2P-671TF


ACM2012-2P-801TF

ACM2012-2P-901TF

ACM2012-2P-102TF

ACM2012-2P-222TF


Test Equipment

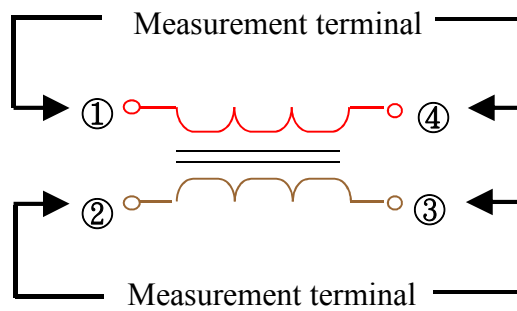
Impedance

Measured by using Agilent E4991A RF Impedance Analyzer.



DC Resistance

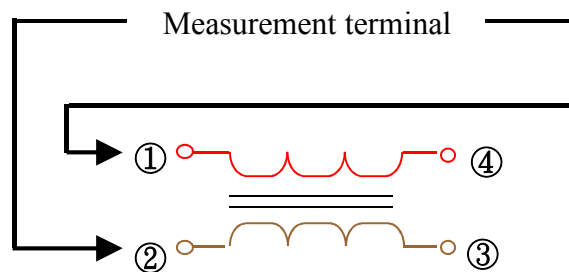
Measured by using Chroma 16502 mill ohm meter.



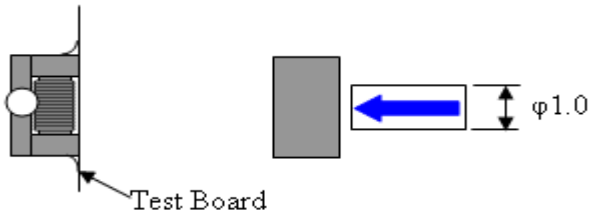
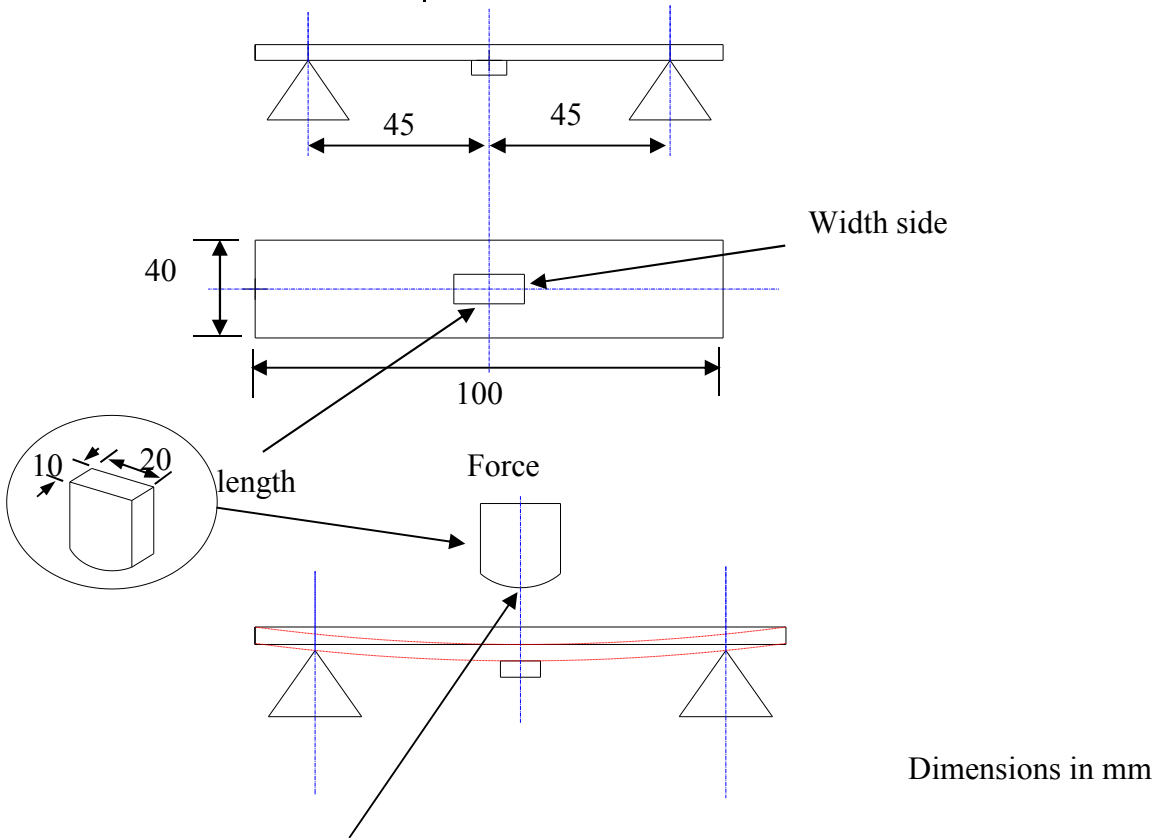
Insulation Resistance

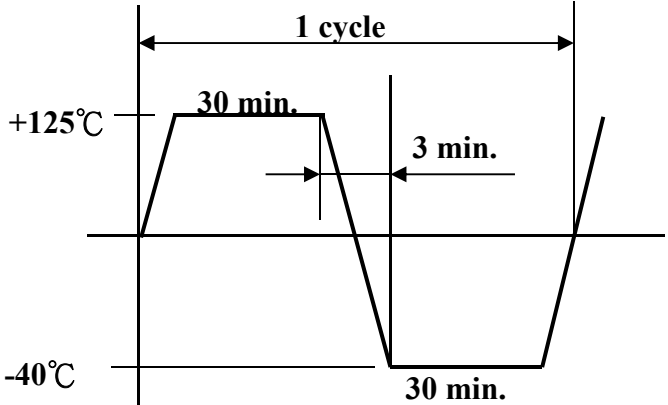
Measured by using Chroma 19073

Measurement voltage : 50v .



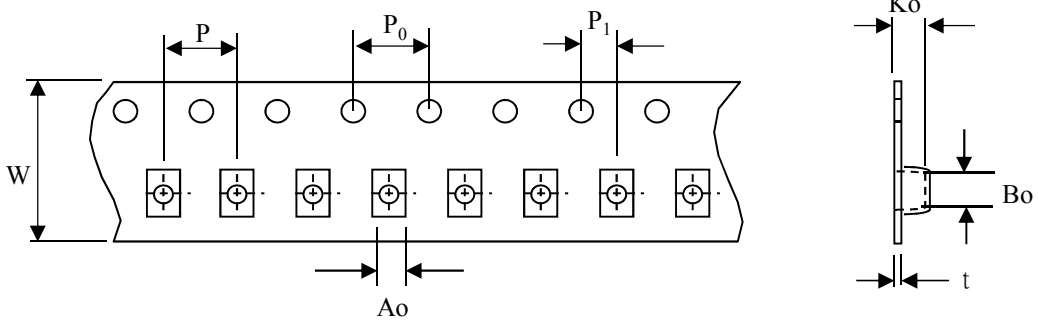
Reliability Test

Operating temperature : -40 to +125°C		Storage temp and humidity : 20~25°C ,60%RH max.
Item	Specifications	Test conditions
Solder ability	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. Dip pads in flux and dip in solder pot(96.5 Sn/3.5 Ag solder) at 255°C ±5°C.
Terminal strength	The terminal electrode and the ferrite must not be damaged.	Solder a chip to test substrate , and then laterally apply a load 0.5Kg 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.  R10 Test board : Glass base epoxy multilayer board pc board pattern. PC board pattern : Recommended PC board pattern.

Item	Specifications	Test conditions
High temperature resistance	Appearance : Ferrite shall not be damaged. initial value. insulation resistance: >10(MΩ) DC resistance : standard value	Temperature : +125±2°C Applied voltage : Rated voltage Applied current : Rated current Testing time : 500±12 hours Measurement : After placing for 24 hours min.
Humidity resistance	inside.	Temperature : +85±2°C Humidity : 90 to 95%RH Applied current : Rated current Applied voltage : Rated voltage Testing time : 500±12 hours Measurement : After placing for 24 hours min.
Thermal cycle		Temperature : -40°C,+125°C kept stabilized for 30 minutes each. Cycle : 100 cycle Measurement : After placing for 24 hours min. <div style="text-align: center;">  <p>The diagram illustrates a thermal cycle between +125°C and -40°C. The cycle consists of: a ramp up to +125°C, a 30-minute dwell at +125°C, a ramp down to -40°C, a 30-minute dwell at -40°C, and a ramp up back to +125°C. The dwell times at each temperature are 3 minutes. The entire sequence is labeled as '1 cycle'.</p> </div>
Low temperature resistance		Temperature : -40±2°C 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 : 1.52 mm Dimension and times : X ,Y and Z directions for 2 hours each.

Packaging

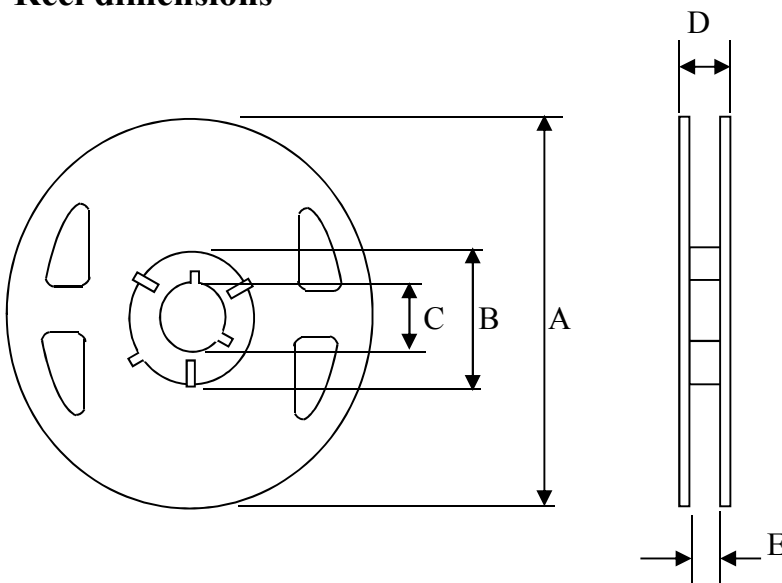
The packaging must be done not to receive any damage during transporting and storing



(Dimensions in mm; Tolerance : ± 0.1)

Symbol	W	P	P_0	P_1	A_o	B_o	K_o	t
Dimension	8	4	4	2	1.5	2.25	1.35	0.24

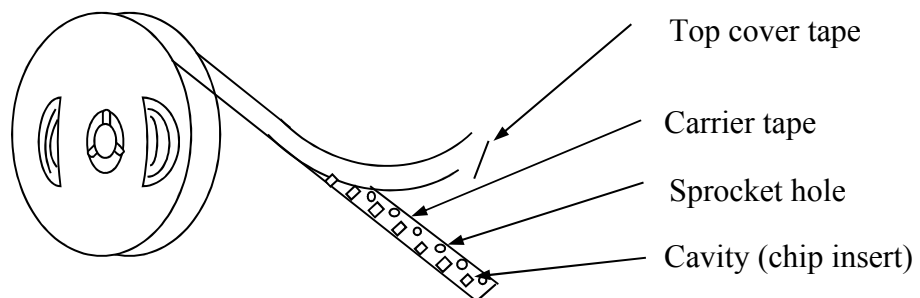
Reel dimensions



(Dimensions in mm)

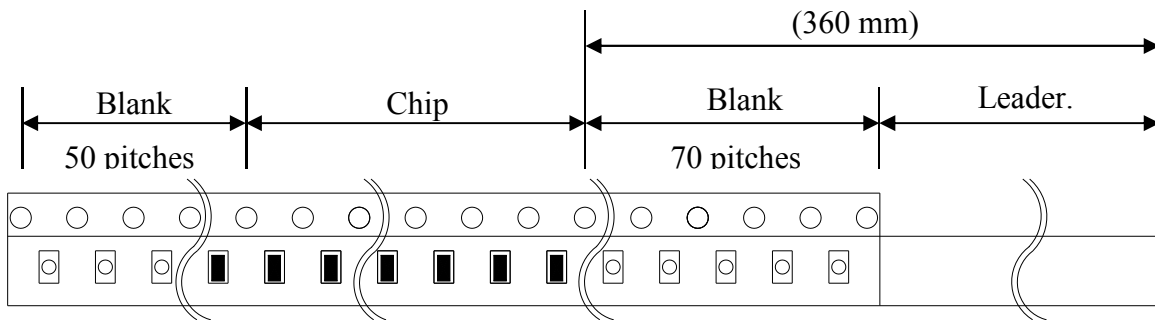
Symbol	T
A	180
B	60
C	13
D	14.4
E	8.4

Tapping figure



Packaging Form

There shall not continuation more than two vacancies of the product.



Material of carrier tape : Polystyrene

Material of cover tape : Polyester

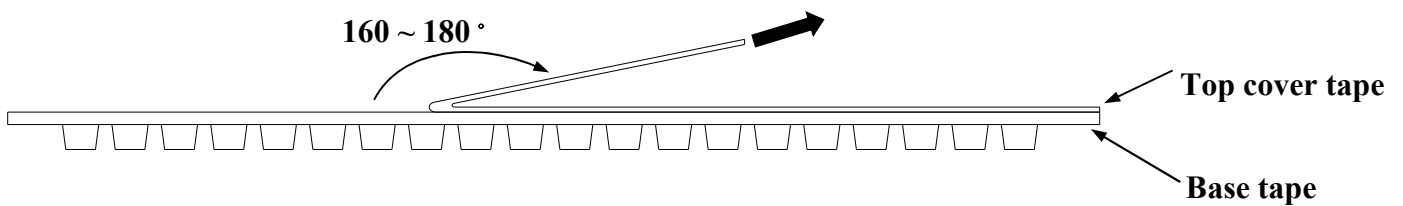
Cover Tape Peel Strength

The force for tearing off cover tape is 0.1~0.69(N) in the arrow direction at the following conditions:

Temperature : 5 ~ 35°C

Humidity : 45 ~ 85%

Atmospheric pressure : 860 ~ 1060 hpa

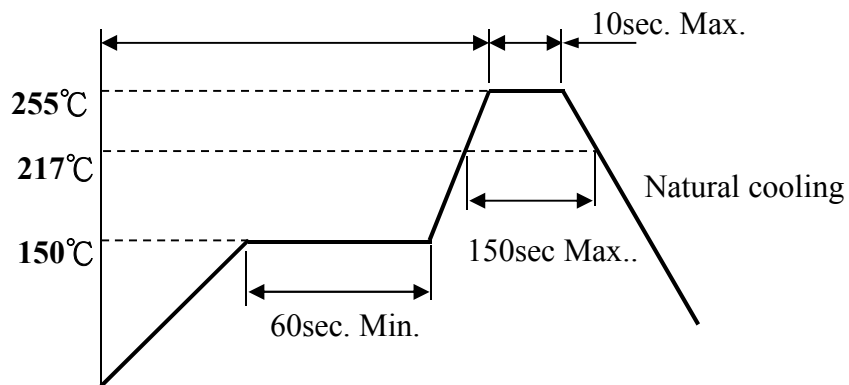


Packing Quantity

φ180 mm reel T type : 2000 pcs./reel

Recommended Reflow Pattern

Reflow : until two times



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.

5 seconds max. at 260°C.