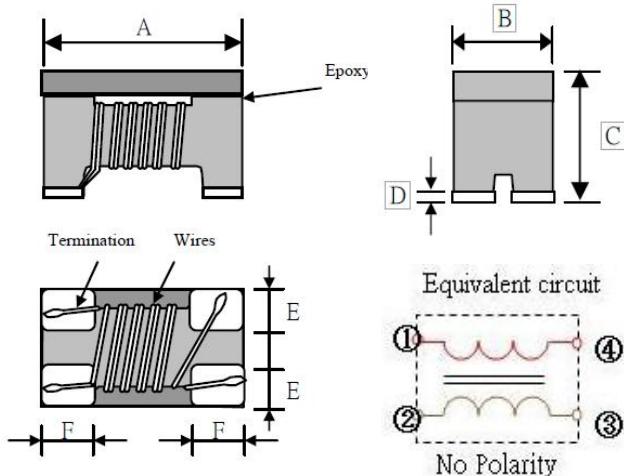


## Common mode filter

### ◆ DIMENSIONS



A	$2.5 \pm 0.2$
B	$2.0 \pm 0.2$
C	$1.8 \pm 0.2$
D	$0.2 \pm 0.1$
E	$0.4 \pm 0.1$
F	$0.45 \pm 0.1$

### ◆ ELECTRICAL CHARACTERISTICS

P/N	Z (Ω)	DCR(Ω)	Idc(mA)	Rated Voltage	Insulation Resistance
	Common mode Impedance At° 100MHz			(V)Typical	(MΩ) Min
	(Max)	(Max)			
SMW2520S301ATT	250min (300Typ)	0.35	400	20	10
SMW2520S601ATT	450min (600Typ)	0.45	300	20	10
SMW2520S102ATT	750min (1000Typ)	0.9	200	20	10

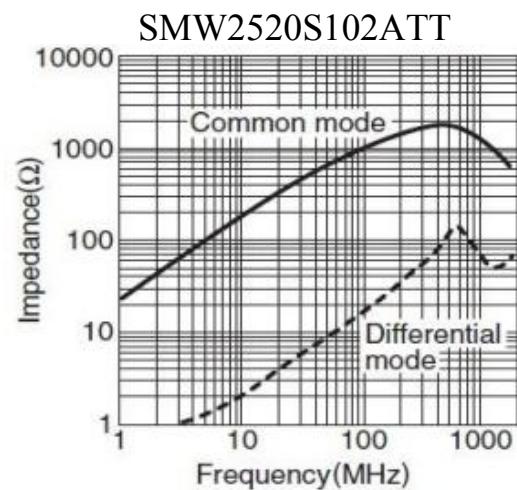
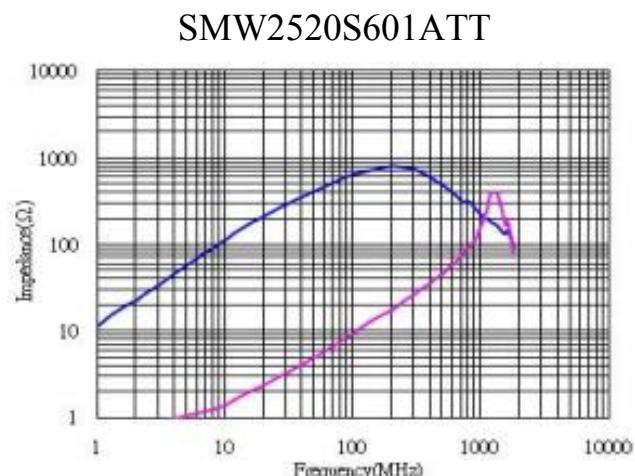
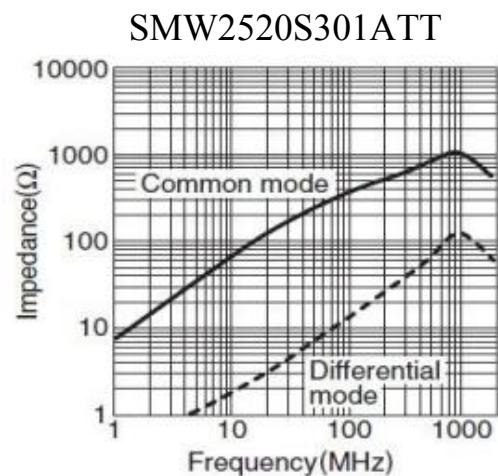
Operating temperature : -25 to +85°C

Storage temp and humidity : -40 to +85°C , 70%RH max

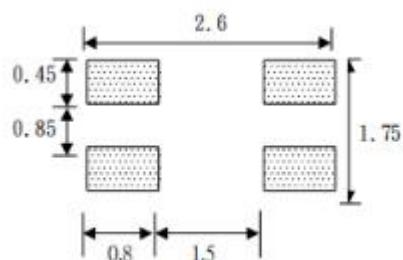
Typical Heat Rating DC Current would cause an approximately  $\Delta T$  of 40°C

If Use Wave soldering is there will be some risk. Re-flow soldering temperatures below 240 degrees, there will be unwitting risk

## ◆ PERFORMANCE CURVES



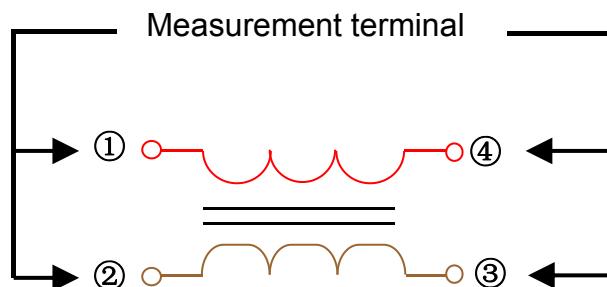
**Recommended Soldering Conditions (Please use this product by reflow soldering)**  
**Recommended Footprint(mm)**



## ◆ Test Equipment

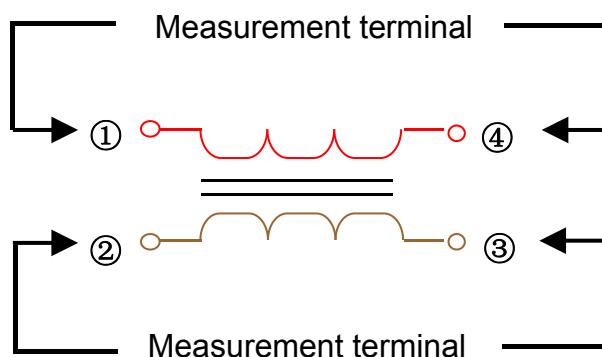
### Impedance / Inductance

Measured by using Agilent 4291A RF Impedance Analyzer.



### DC Resistance

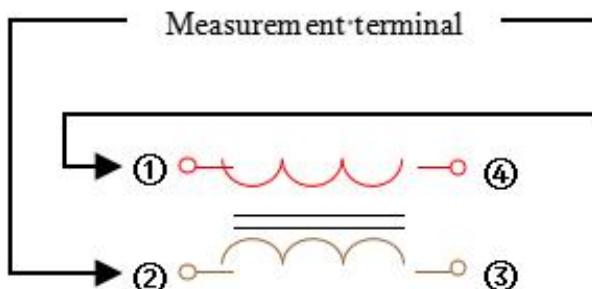
Measured by using Chroma 4338 mill ohm meter.



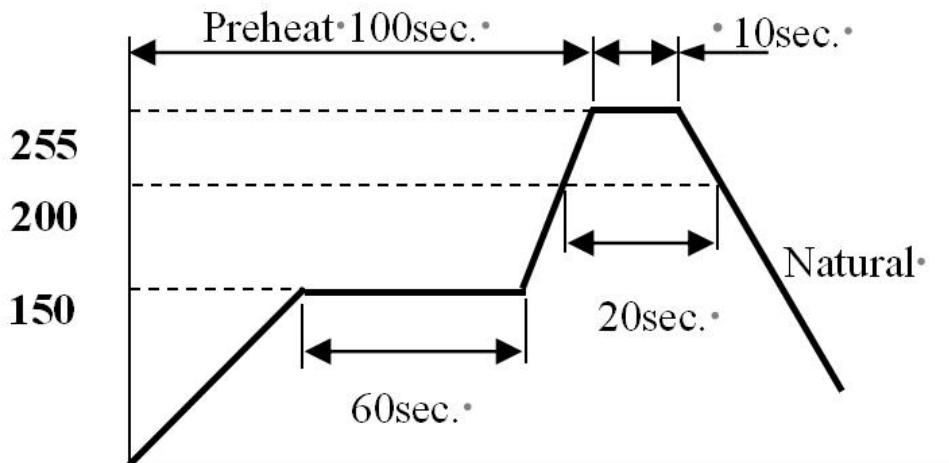
### Insulation Resistance

Measured by using Chroma 19073

Measurement voltage : 50v , Measurement time : 60 sec

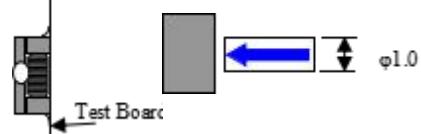


## ◆ RECOMMENDED SOLDERING TEMP. GRAPH



## ◆ MECHANICAL RELIABILITY

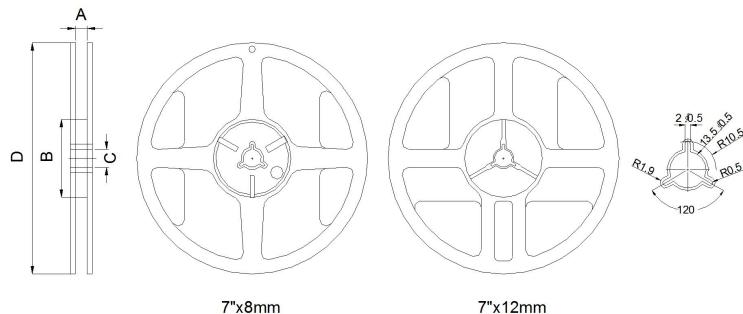
TEST	Specification & Requirement		Method Used
Solderability	The surface of terminal/pin tested shall be covered with new solder by 90%		Solder heat proof: Preheating: $150 \pm 10^\circ\text{C}$ 60 seconds Soldering: $245 \pm 5^\circ\text{C}$ for $4 \pm 1$ sec
Solder Heat Resistance	Components should have not evidence of electrical and mechanical damage Impedance: within $\pm 15\%$ of initial value		Preheating: $150^\circ\text{C}$ 60secs Solder temperature: $260 \pm 5^\circ\text{C}$ Flux: rosin Dip time: $10 \pm 0.5$ secs
Terminal strength	Series No.	F (Kg)	Solder a chip to test substrate and then laterally apply a force in the arrow direction
	1608	0.5	
	2012	0.5	
	2520	0.5	
	3216	1.0	



## ◆ ENDURANCE RELIABILITY

TEST	Specification & Requirement	Method Used
Thermal Shock	Impedance change within $\pm 15\%$ Without mechanical damage	$-65^\circ\text{C}$ , (30 mins) $\rightarrow$ room temp. (2 mins) $\rightarrow$ $125^\circ\text{C}$ , (30 mins) $\rightarrow$ room temp. (2 mins) 50 cycles
Humidity Resistance	Impedance change within $\pm 15\%$ Without mechanical damage	Apply IDC current @ $60^\circ\text{C}$ ambient Humidity: 90% Duration: 168 hrs Storing Temp. $-40 \pm 2^\circ\text{C}$ for total 168 $+/-$ 0 hours
Low Temp. Storing	Impedance change within $\pm 15\%$ Without mechanical damage	Storing Temp. $125 \pm 2^\circ\text{C}$ for total 168 $+/-$ 0 hours
High Temp. Storing	Impedance change within $\pm 15\%$ Without mechanical damage	

## ◆ Reel Dimension & Tape Dimension



Type	A(mm)	B(mm)	C(mm)	D(mm)	Packaging Quantity
7"x8mm	9.0±0.5	60±2	13.5±0.5	178±2	2000
7"x12mm	13.5±0.5	60±2	13.5±0.5	178±2	2000