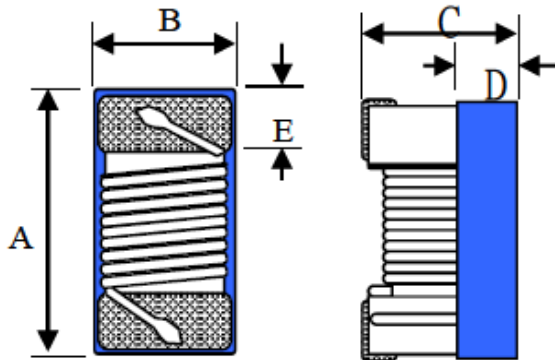


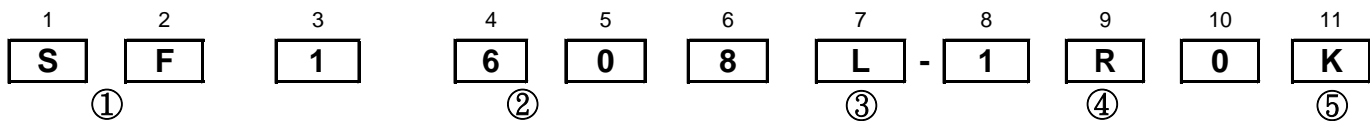
ITEM P/N	SF1608L-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
PRODUCT	SMD Inductor For Power Line	TEST FREQUENCY	2.5 ~ 7.9 MHz / 0.5V

## PACKING DIMENSIONS (mm)



SF1608L	Dimensions
A	1.80 MAX
B	1.20 MAX
C	1.00 MAX
D	0.45 REF
E	0.33 ± 0.1

## EXPLANATION OF PART NUMBERS



### 1. Product Name

### 2. Dimensions

### 3. Material

### 4. Inductance Code

### 5. Inductance Tolerance (J = ±5% , K = ±10% , M = ±20%)

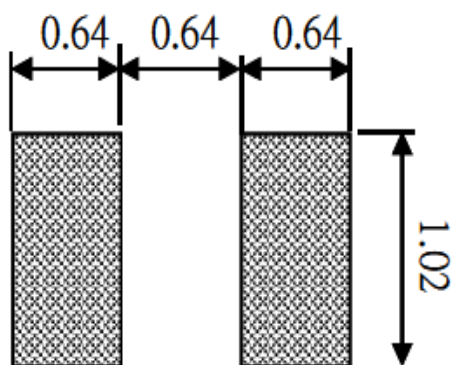
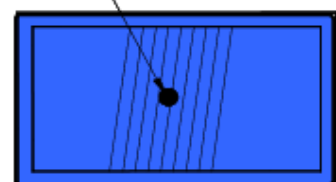
Operating temperature : -25 to +85°C

Idc for Inductance drop 10% from its value without current.

Irms for a 15°C rise above 25°C ambient.

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

## RECOMMENDED FOOTPRINT(Unit:mm)


**1st**

**COLOR CODING**

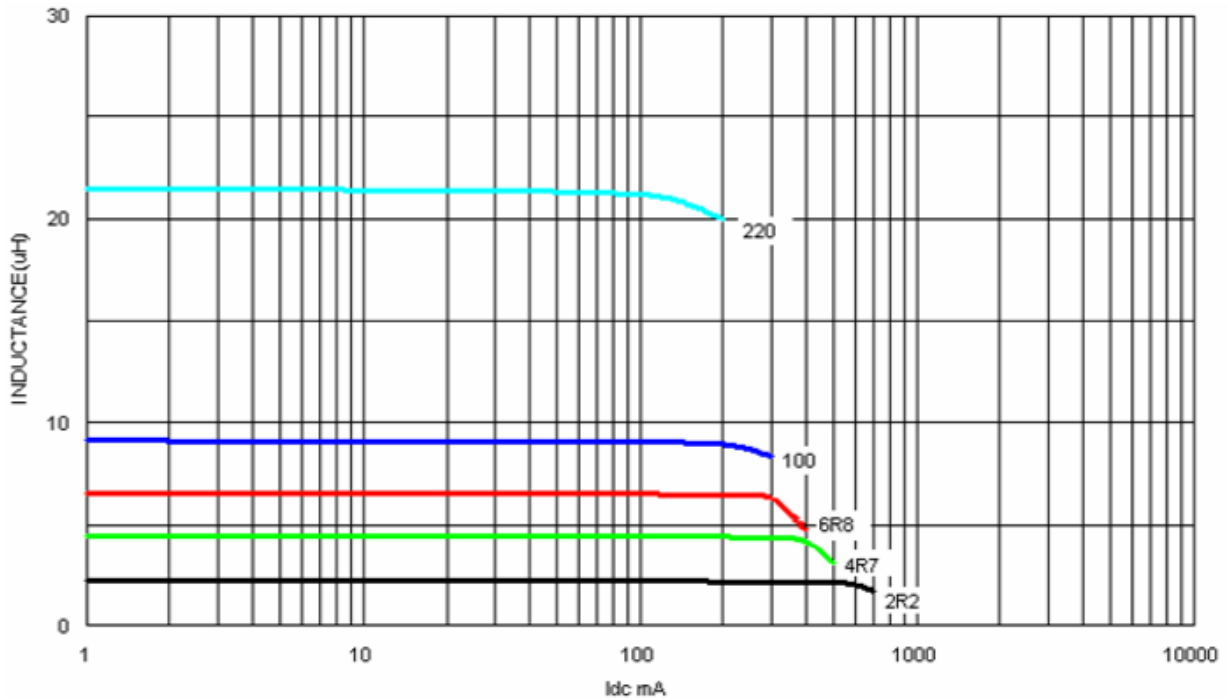
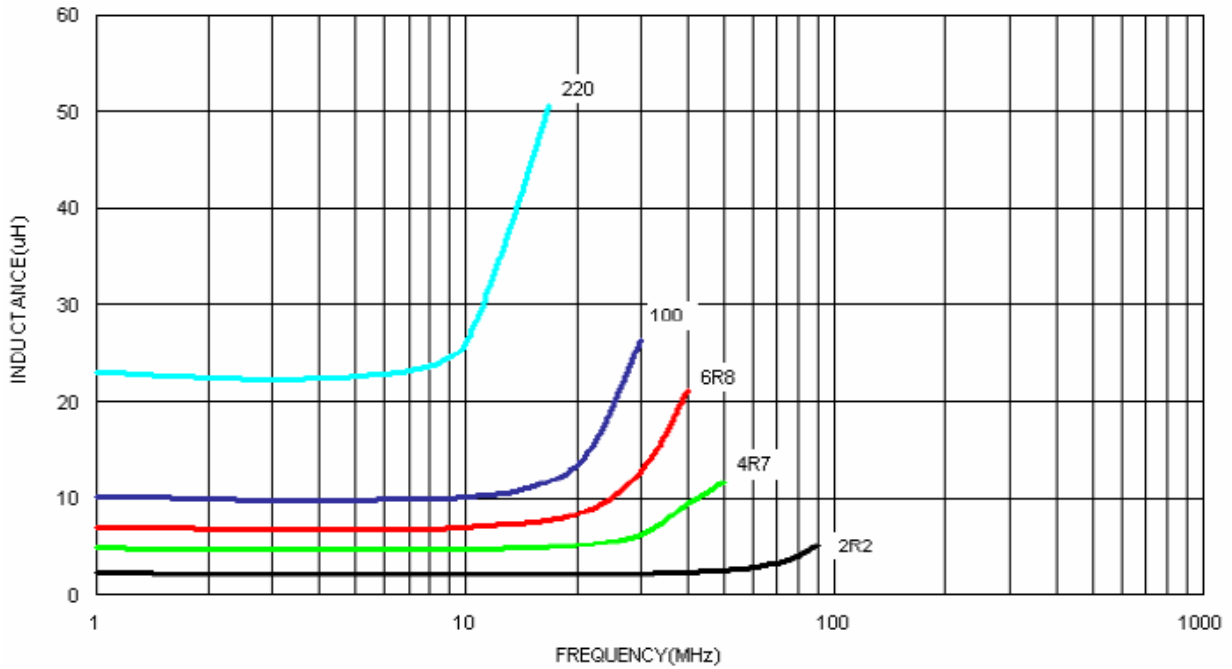
ITEM P/N	SF1608L-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
PRODUCT	SMD Inductor For Power Line	TEST FREQUENCY	2.5 ~ 7.9 MHz / 0.5V

**ELECTRICAL CHARACTERISTICS**

HUNGTRON Part Number	Inductance (uH)/MHz	Inductance Tolerance	Q/MHz Typ.	SRF (MHz) typ.	DCR ( $\Omega$ ) $\pm$ 30%	I dc (mA) typ	I rms (mA) Typ.	Color Coding
SF1608L-1R0□	1.0/7.9	K,M	16/7.9	390	0.32	860	700	Black
SF1608L-1R5□	1.5/7.9	K,M	16/7.9	160	0.40	720	600	Brown
SF1608L-1R8□	1.8/7.9	K,M	16/7.9	121	0.43	640	580	Red
SF1608L-2R2□	2.2/7.9	K,M	16/7.9	103	0.56	600	580	Orange
SF1608L-2R7□	2.7/7.9	K,M	16/7.9	72	0.62	540	500	Yellow
SF1608L-3R3□	3.3/7.9	K,M	16/7.9	66	0.70	500	500	Green
SF1608L-3R9□	3.9/7.9	K,M	16/7.9	61	0.83	460	460	Blue
SF1608L-4R7□	4.7/7.9	K,M	16/7.9	51	0.97	400	420	Violet
SF1608L-5R6□	5.6/7.9	K,M	16/7.9	47	1.10	380	380	Gray
SF1608L-6R8□	6.8/7.9	K,M	16/7.9	43	1.50	340	340	White
SF1608L-8R2□	8.2/7.9	K,M	16/7.9	40	1.68	300	300	Black
SF1608L-100□	10/2.5	K,M	14/2.5	36	1.85	280	280	Brown
SF1608L-120□	12/2.5	K,M	14/2.5	32	2.28	260	260	Red
SF1608L-150□	15/2.5	K,M	14/2.5	29	2.60	240	240	Orange
SF1608L-180□	18/2.5	K,M	14/2.5	28	2.90	220	220	Yellow
SF1608L-220□	22/2.5	K,M	14/2.5	24	3.61	200	200	Green
SF1608L-270□	27/2.5	K,M	14/2.5	20	5.20	140	140	Blue
SF1608L-330□	33/2.5	K,M	14/2.5	15	6.60	120	120	Violet

ITEM P/N	SF1608L-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
PRODUCT	SMD Inductor For Power Line	TEST FREQUENCY	2.5 ~ 7.9 MHz / 0.5V

## Characteristics(L,Q vs. Frequency)



ITEM P/N	SF1608L-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
PRODUCT	SMD Inductor For Power Line	TEST FREQUENCY	2.5 ~ 7.9 MHz / 0.5V

**Reliability and Test Condition**

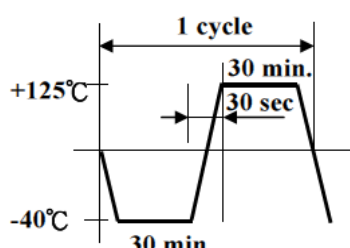
Item	Specifications	Test conditions
Solderability	The metalized area must have 90% minimum solder coverage.	Dip pads in flux and dip in solder pot( 96.5 Sn/3.5 Ag solder) at 255°C ±5°C.
Resistance to soldering heat	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Inductors shall be reflowed onto a PC board using 96.5 Sn/3.5 Ag solder paste. Solder process shall be at a maximum temperature of 260°C. For 96.5 Sn/3.5 Ag solder paste:>217°C for 90 seconds
Vibration	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Solder specimen inductor on the test printed circuit board. Apply vibrations in each of the x,y and z directions for 2 house for a total of 6 hours. Frequency : 10~50 Hz Amplitude : 1.5mm
High temperature resistance	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Inductors shall be subjected to temperature 125±2°C for 50±12 hours. Measure the test items after leaving the inductors at room temperature and humidity for 2 hours.
Static Humidity	Inductors must not have a shorted or openwinding.	Inductors shall be subjected to temperature 85±2°C and 90 to 95%RH. for ten 24-hours. Measure the test items after leaving the inductors at room temperature and humidity for 2 hours.
Component adhesion (push test)	Inductors shall be subjected to 0.9Kg	Inductors shall be reflow soldered (255°C ±5°C for 10 seconds) to a tinned copper substrate. A force gauge shall be applied to the side of the component. The device must withstand the stated force without a failure of the termination.

# CHARACTERISTICS

RoHS  
COMPLIANT

ITEM P/N	SF1608L-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
PRODUCT	SMD Inductor For Power Line	TEST FREQUENCY	2.5 ~ 7.9 MHz / 0.5V

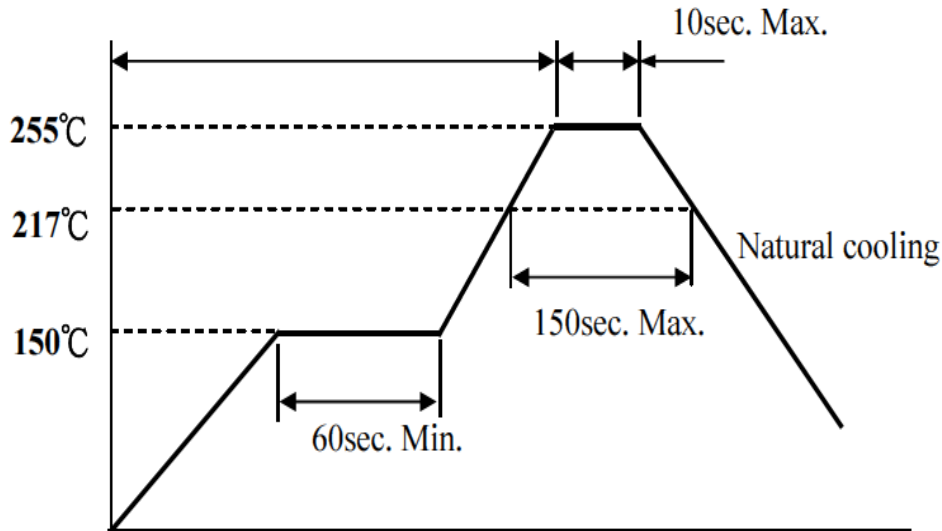
## Reliability and Test Condition

Item	Specifications	Test conditions
Low temperature storage	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Inductors shall be subjected to temperature $-40\pm 2^{\circ}\text{C}$ for $48\pm 12$ hours. Measure the test items after leaving the inductors at room temperature and humidity for 1 to 2 hours.
Resistance to solvent	There must be no case deformation, change in dimensions, or obliteration of marking.	Inductors must withstand 6 minutes of alcohol or water.
Thermal shock	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Inductors shall be subjected to 10 cycles to the following temperature cycle:   Measure the test items after leaving the inductor at room temperature and humidity for 2 hours.

ITEM P/N	SF1608L-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
PRODUCT	SMD Inductor For Power Line	TEST FREQUENCY	2.5 ~ 7.9 MHz / 0.5V

## 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 to directly touch the Ceramic body outside of terminal electrode.

4 seconds max. at 260°C.

## 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, Ammon)

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.

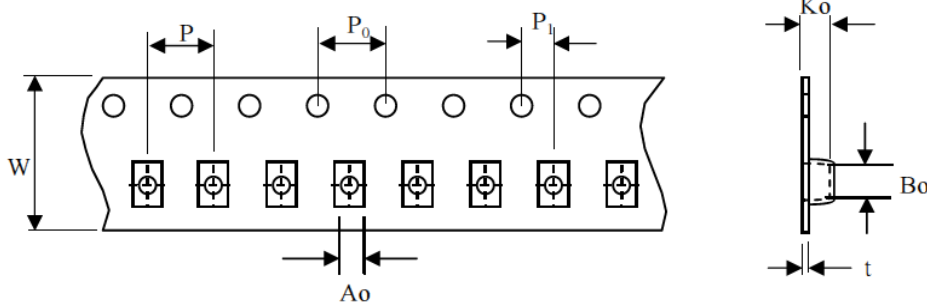
## Others

- 1 Operating temperature range : Ceramic Series :-40~+125°C
- 2 Storage condition : Temperature 20°~25°C, Relative Humidity 40%~60%
- 3 Recommended wire wound inductors should be used within 6 months from the time of delivery.

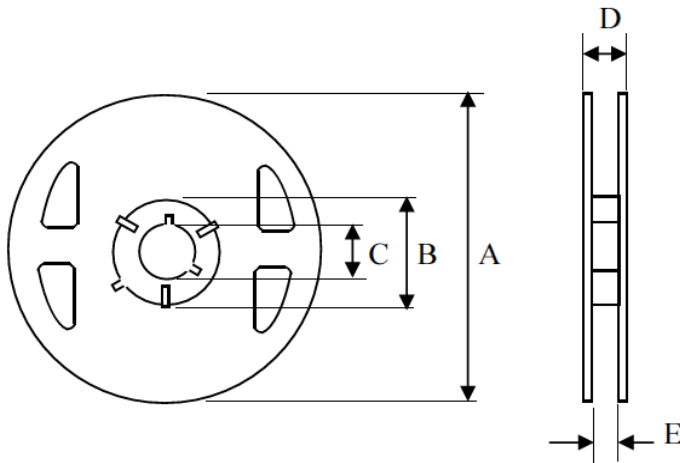
ITEM P/N	SF1608L-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
PRODUCT	SMD Inductor For Power Line	TEST FREQUENCY	2.5 ~ 7.9 MHz / 0.5V

**Packaging**

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

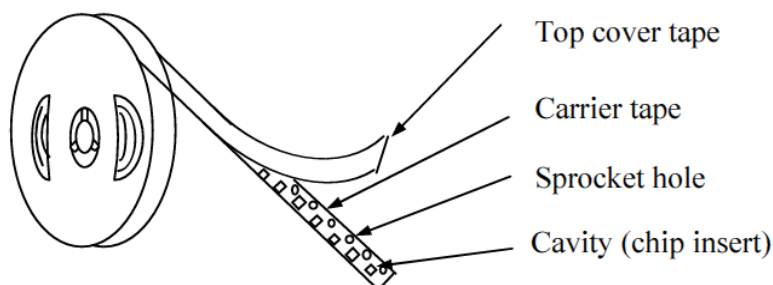
**Tape dimensions**(Dimensions in mm; Tolerance :  $\pm 0.1$ )

Symbol	W	P	P <sub>0</sub>	P <sub>1</sub>	Ao	Bo	Ko	t
Dimension	8	4	4	2	1.3	1.8	1.1	0.22

**Reel dimensions**

(Dimensions in mm)

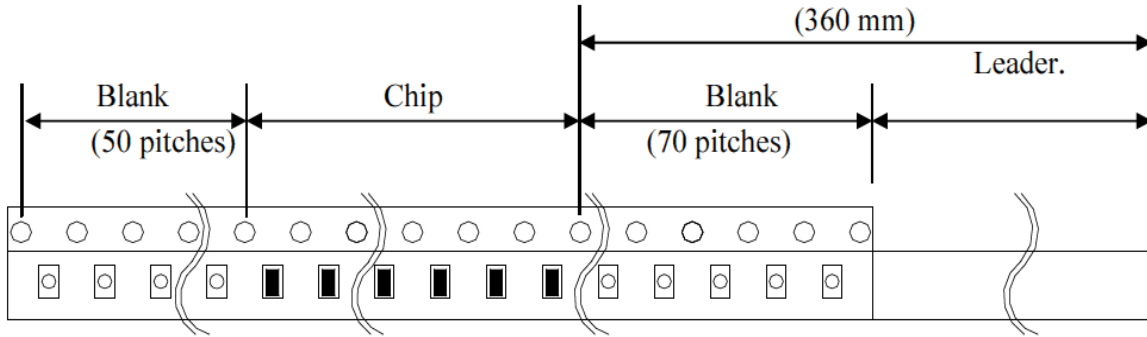
Symbol	T
A	180
B	60
C	13
D	14.4
E	8.4

**Tapping figure**

ITEM P/N	SF1608L-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
PRODUCT	SMD Inductor For Power Line	TEST FREQUENCY	2.5 ~ 7.9 MHz / 0.5V

### Packaging Form

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



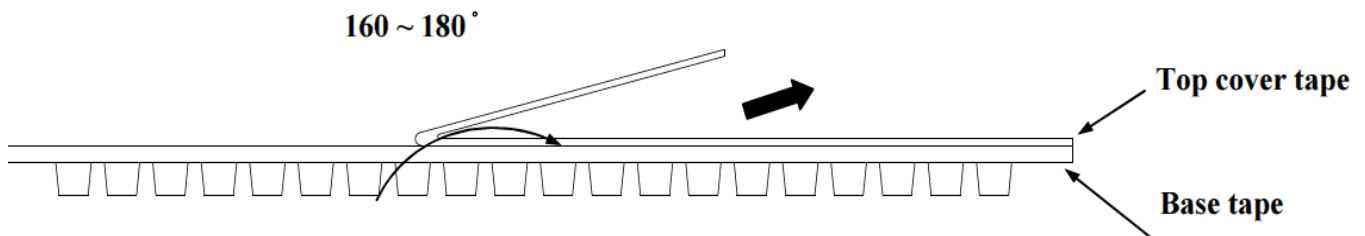
### Cover Tape Peel Strength

The force for tearing off cover tape is 0.1~0.6(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 type : 4,000 pcs./reel