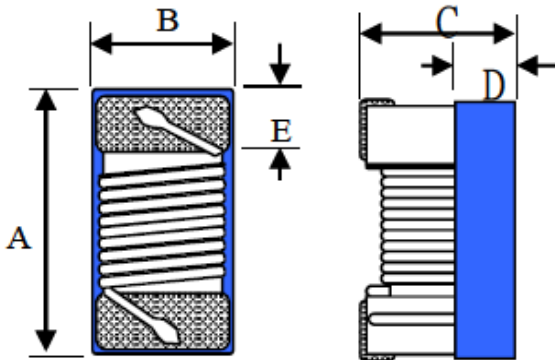


COIL SPECIFICATION

**RoHS
COMPLIANT**

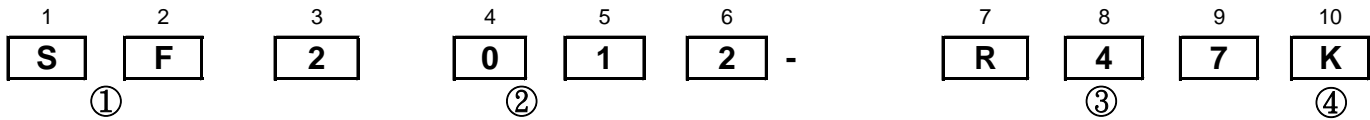
ITEM P/N	SF2012-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
PRODUCT	SMD Inductor For Power Line	TEST FREQUENCY	7.9 ~ 25 MHz / 0.5V

PACKING DIMENSIONS (mm)



SF2012	Dimensions
A	2.4 MAX
B	1.65 MAX
C	1.2 ± 0.1
D	0.65 REF
E	0.44 ± 0.1

EXPLANATION OF PART NUMBERS



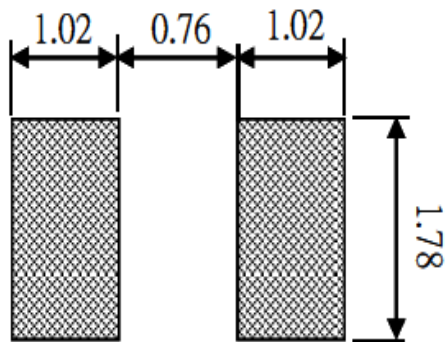
1. Product Name
2. Dimensions
3. Inductance Code
4. Inductance Tolerance (J = ±5% , K = ±10% , M = ±20%)

Operating temperature : -25 to +85°C

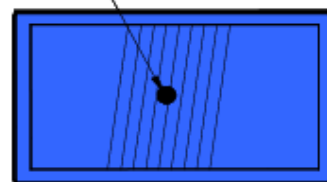
Idc for Inductance drop 10% from its value without current.

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

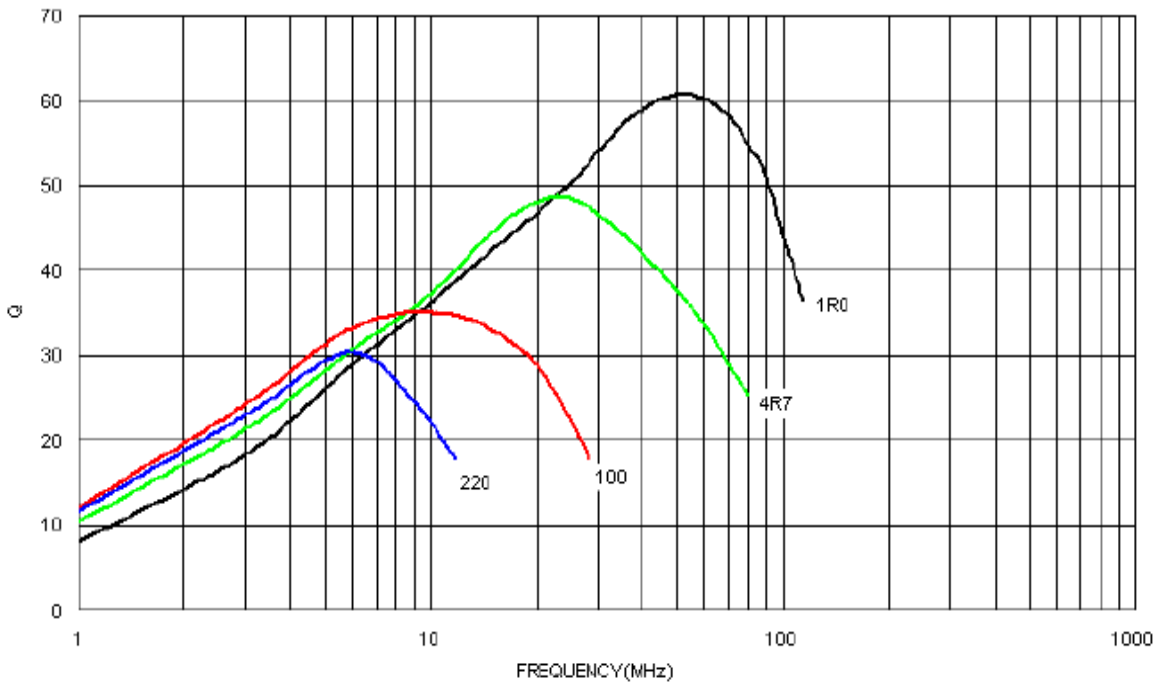
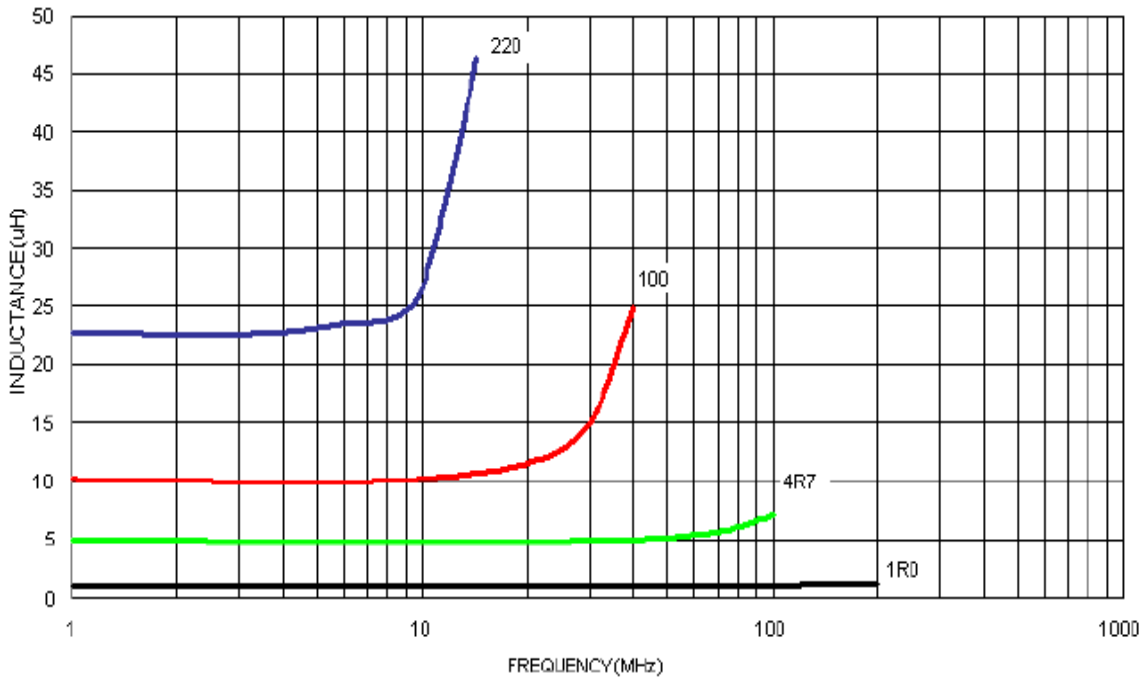
ITEM P/N	SF2012-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
PRODUCT	SMD Inductor For Power Line	TEST FREQUENCY	7.9 ~ 25 MHz / 0.5V

ELECTRICAL CHARACTERISTICS

HUNGTRON Part Number	Inductance (uH)/MHz	Inductance Tolerance	Q/MHz Min.	SRF (MHz) Min.	DCR (Ω) Max.	I dc (mA) Max.	Color Coding
SF2012-R11□	0.11/25	K	25/25	1200	0.05	2000	White
SF2012-R12□	0.12/25	J,K	25/25	1000	0.18	1500	Violet
SF2012-R15□	0.15/25	J,K	25/25	1000	0.18	1400	Gray
SF2012-R18□	0.18/25	J,K	30/25	1000	0.20	1400	Black
SF2012-R22□	0.22/25	J,K	30/25	830	0.25	1350	Brown
SF2012-R27□	0.27/25	J,K	30/25	800	0.38	1300	Red
SF2012-R33□	0.33/25	J,K	30/25	750	0.35	1200	Orange
SF2012-R39□	0.39/25	J,K	30/25	700	0.35	1160	Yellow
SF2012-R47□	0.47/25	J,K	30/25	690	0.40	1100	Green
SF2012-R56□	0.56/25	J,K	30/25	640	0.40	1040	Blue
SF2012-R62□	0.62/25	J,K	30/25	640	45.00	980	Brown
SF2012-R68□	0.68/25	J,K	30/25	510	0.50	900	Violet
SF2012-R82□	0.82/25	J,K	30/25	500	0.50	900	Gray
SF2012-R91□	0.91/25	J,K	30/25	500	0.55	900	Yellow
SF2012-1R0□	1.0/7.9	J,K	20/7.9	470	0.50	840	White
SF2012-1R2□	1.2/7.9	J,K	20/7.9	400	0.75	800	Black
SF2012-1R5□	1.5/7.9	J,K	25/7.9	400	1.00	720	Brown
SF2012-1R8□	1.8/7.9	J,K	25/7.9	230	1.00	660	Red
SF2012-2R2□	2.2/7.9	J,K	25/7.9	200	1.05	600	Orange
SF2012-2R7□	2.7/7.9	J,K	25/7.9	130	1.18	500	Yellow
SF2012-3R3□	3.3/7.9	J,K	25/7.9	160	1.26	480	Green
SF2012-3R9□	3.9/7.9	J,K	25/7.9	130	1.75	440	Blue
SF2012-4R7□	4.7/7.9	J,K	25/7.9	120	1.87	390	Violet
SF2012-5R6□	5.6/7.9	J,K	25/7.9	90	2.00	340	Gray
SF2012-6R8□	6.8/7.9	J,K	25/7.9	55	2.15	300	White
SF2012-8R2□	8.2/7.9	J,K	25/7.9	40	2.37	280	Black
SF2012-100□	10/2.5	J,K	16/2.5	40	2.55	260	Brown
SF2012-120□	12/2.5	J,K	16/2.5	37	2.80	220	Red
SF2012-150□	15/2.5	J,K	16/2.5	30	3.80	200	Orange
SF2012-180□	18/2.5	J,K	16/2.5	23	4.48	180	Yellow
SF2012-220□	22/2.5	J,K	16/2.5	20	6.30	160	Green
SF2012-270□	27/2.5	J,K	16/2.5	19	6.85	140	Blue
SF2012-330□	33/2.5	J,K	16/2.5	18	7.60	120	Violet
SF2012-390□	39/2.5	J,K	15/2.5	16	8.20	100	Gray

ITEM P/N	SF2012-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
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Characteristics(L,Q vs. Frequency)



ITEM P/N	SF2012-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
PRODUCT	SMD Inductor For Power Line	TEST FREQUENCY	7.9 ~ 25 MHz / 0.5V

Reliability and Test Condition

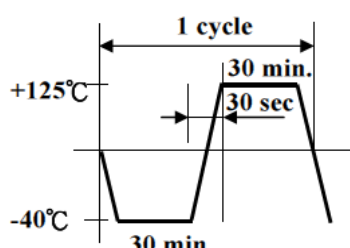
Item	Specifications	Test conditions
Solderability	The metalized area must have 90% minimum solder coverage.	Dip pads in flux and dip in solder pot(96.5 Sn/3.5 Ag solder) at 255°C ±5°C.
Resistance to soldering heat	There must be no case deformation or change in dimensions. Inductance must not change more 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	SF2012-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
PRODUCT	SMD Inductor For Power Line	TEST FREQUENCY	7.9 ~ 25 MHz / 0.5V

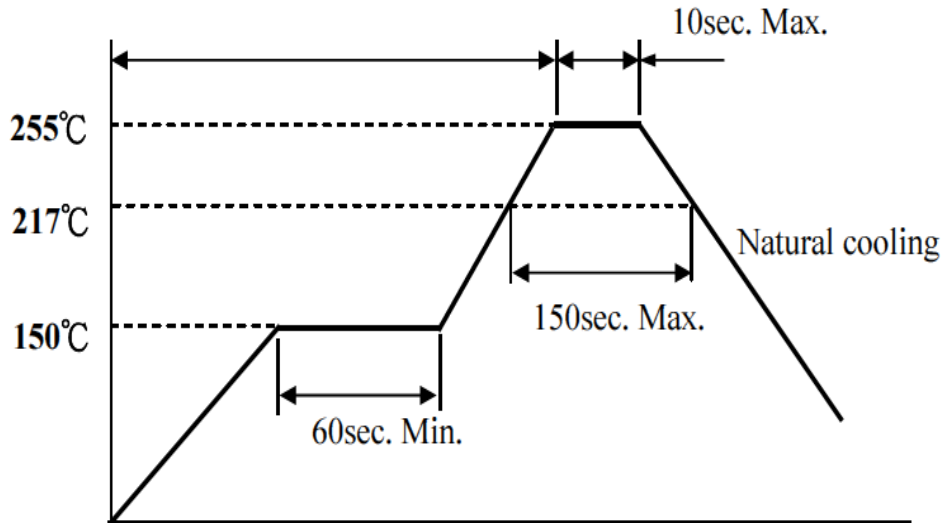
Reliability and Test Condition

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 ± 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:  <p>Measure the test items after leaving the inductors at room temperature and humidity for 2 hours.</p>

ITEM P/N	SF2012-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
PRODUCT	SMD Inductor For Power Line	TEST FREQUENCY	7.9 ~ 25 MHz / 0.5V

Soldering and Mounting**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.

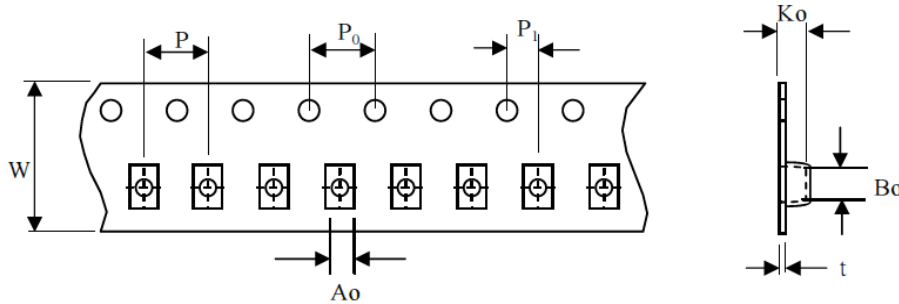
Others

- 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.

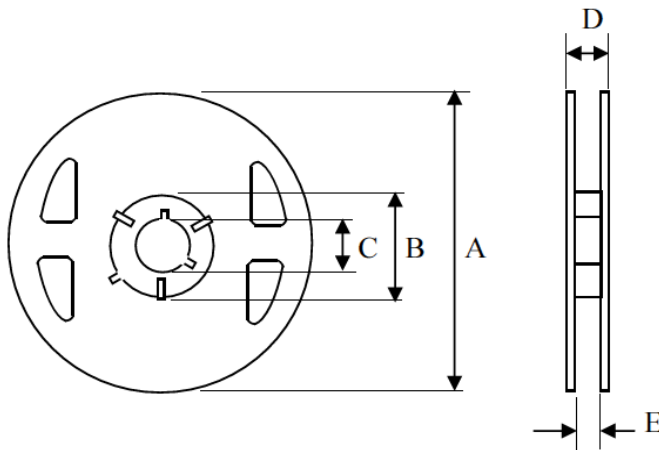
ITEM P/N	SF2012-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
PRODUCT	SMD Inductor For Power Line	TEST FREQUENCY	7.9 ~ 25 MHz / 0.5V

Packaging

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

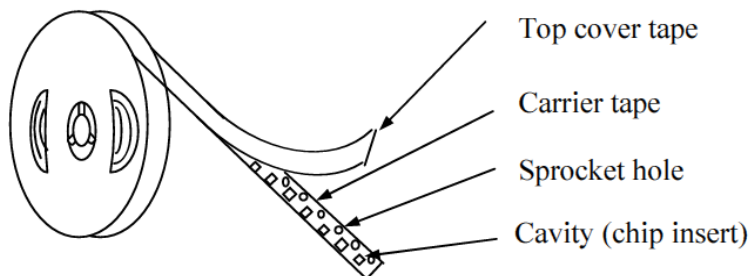
Tape dimensions(Dimensions in mm; Tolerance : ± 0.1)

Symbol	W	P	P ₀	P ₁	Ao	Bo	Ko	t
Dimension	8	4	4	2	1.75	2.55	1.30	0.22

Reel dimensions

(Dimensions in mm)

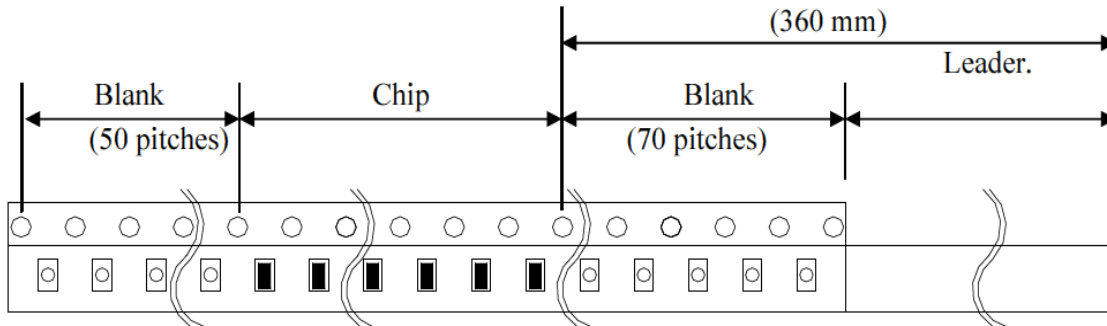
Symbol	T
A	180
B	60
C	13
D	14.4
E	8.4

Tapping figure

ITEM P/N	SF2012-SERIES	TEST INSTRUMENT	Agilent4291B / Agilent4338B
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Packaging Form

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



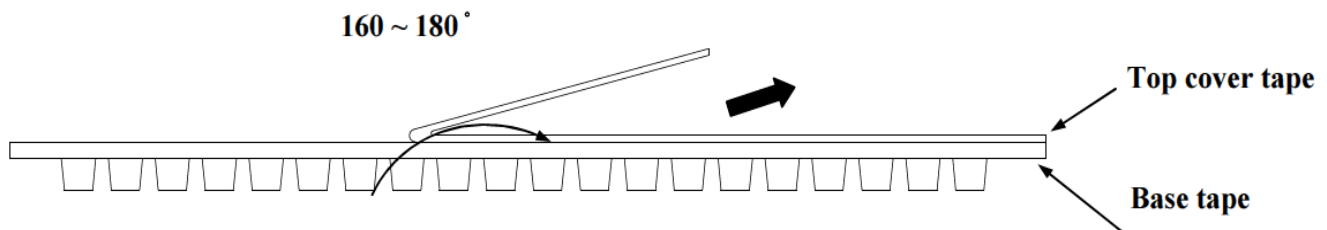
Cover Tape Peel Strength

The force for tearing off cover tape is 0.1~0.6(N) in the arrow direction at the following conditi

Temperature : 5 ~ 35°C

Humidity : 45 ~ 85%

Atmospheric pressure : 860 ~ 1060 hpa



Packing Quantity

φ180 mm reel type : 2,000 pcs./reel