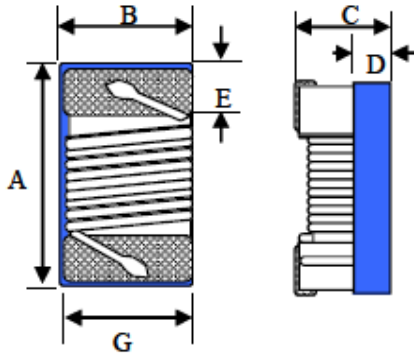


ITEM P/N	SI1608-SERIES	TEST INSTRUMENT	Agilent4291B / 4338B
PRODUCT	High Frequency SMD Inductor	TEST FREQUENCY	250 MHz / 0.1V

PACKING DIMENSIONS (mm)

SI1608	Dimensions
A	1.80 MAX
B	1.20 MAX
C	1.02 MAX
D	0.45 REF
E	0.33
G	0.9

EXPLANATION OF PART NUMBERS

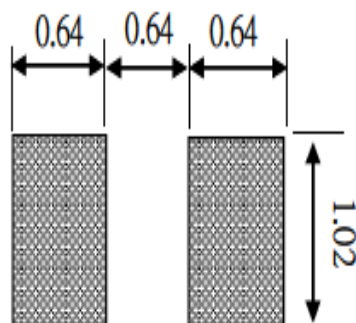
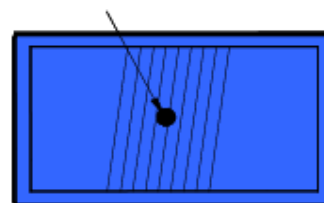
1	2	3	4	5	6	7	8	9	10	
S	I	1	6	0	8	-	1	N	6	J
	①			②			③		④	

1. Product Name
2. Dimensions
3. Inductance Code
4. Inductance Tolerance (G = $\pm 2\%$, J = $\pm 5\%$, K = $\pm 10\%$)

Operating temperature : -40 to +125°C

I_{rms} 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	SI1608-SERIES	TEST INSTRUMENT	Agilent4291B / 4338B
PRODUCT	High Frequency SMD Inductor	TEST FREQUENCY	250 MHz / 0.1V

ELECTRICAL CHARACTERISTICS

HUNGTRON	Inductance	Inductance	Q/MHz	900MHz		1.7GHz		SRF	DCR	I _{rms}	Color
Part Number	(nH)/MHz	Tolerance	Min.	L typ	Q typ	L typ	Q typ	(Min.) MHz	(Ω) Max	(mA) Max.	Coding
SI1608-1N6□	1.6/250	J,K	24/250	1.61	72.9	1.61	89.6	12500	0.030	700	Red
SI1608-1N8□	1.8/250	J,K	16/250	1.77	46.6	1.77	59.7	12500	0.045	700	Black
SI1608-2N2□	2.2/250	J,K	13/250	2.14	26	2.13	34.1	12500	0.250	700	Yellow
SI1608-3N3□	3.3/250	J,K	30/250	3.42	73.5	3.46	95.4	5900	0.045	700	Blue
SI1608-3N6□	3.6/250	J,K	22/250	3.68	64.2	3.73	82.8	5900	0.063	700	Red
SI1608-3N9□	3.9/250	J,K	22/250	3.9	50.1	3.94	67.3	6900	0.080	700	Brown
SI1608-4N3□	4.3/250	J,K	22/250	4.44	67.5	4.59	81.6	5900	0.063	700	Orange
SI1608-4N7□	4.7/250	J,K	20/250	4.65	58.8	4.75	75.4	5800	0.085	700	Violet
SI1608-5N1□	5.1/250	J,K	20/250	5.07	54.5	5.21	70.1	5700	0.115	700	Green
SI1608-5N6□	5.6/250	J,K	20/250	5.48	43.7	5.66	55.2	5800	0.160	700	Black
SI1608-6N3□	6.3/250	J,K	26/250	6.54	68.7	6.71	88.5	5700	0.115	700	White
SI1608-6N8□	6.8/250	J,K	27/250	6.89	62.9	7.08	82.3	5800	0.125	700	Red
SI1608-7N5□	7.5/250	J,K	28/250	7.57	65.2	7.84	85.6	4800	0.115	700	Brown
SI1608-8N2□	8.2/250	J,K	30/250	8.13	65	8.47	82.2	4700	0.125	700	Orange
SI1608-8N7□	8.7/250	J,K	28/250	8.76	63.9	9.22	76.4	4600	0.109	700	Yellow
SI1608-9N1□	9.1/250	J,K	28/250	9.21	62.3	9.77	75.9	4600	0.120	700	Black
SI1608-9N5□	9.5/250	J,K	28/250	9.79	62.3	10.6	69.2	5400	0.145	700	Blue
SI1608-10N□	10/250	G,J,K	31/250	10.4	69.2	10.8	90.9	4800	0.145	700	Orange
SI1608-11N□	11/250	G,J,K	30/250	11.2	67.7	11.8	85.7	4000	0.145	700	Gray
SI1608-12N□	12/250	G,J,K	35/250	12.4	69.3	13.2	83.4	4000	0.140	700	Yellow
SI1608-15N□	15/250	G,J,K	35/250	15.2	76.7	16.4	88.9	4000	0.180	700	Green
SI1608-16N□	16/250	G,J,K	34/250	16.6	79.1	18.4	79.9	3300	0.170	700	White
SI1608-18N□	18/250	G,J,K	35/250	18.4	76.2	20.1	80.1	3100	0.180	700	Blue
SI1608-19N□	19/250	G,J,K	35/250	19.7	73.8	23.4	62.8	3000	0.190	700	Brown
SI1608-20N□	20/250	G,J,K	38/250	20.5	79.8	23.3	86.8	3000	0.180	700	Red
SI1608-22N□	22/250	G,J,K	38/250	22.7	78.8	25.7	84	3000	0.190	700	Violet
SI1608-23N□	23/250	G,J,K	38/250	24.2	70.9	28.5	72.9	2850	0.205	700	Orange
SI1608-24N□	24/250	G,J,K	36/250	25.7	70.9	31	63.2	2650	0.205	700	Black
SI1608-25N□	25/250	G,J,K	38/250	25.9	84.8	29.7	89.5	2800	0.210	600	Yellow
SI1608-27N□	27/250	G,J,K	40/250	29	59.8	37.4	46.1	2800	0.220	600	Gray
SI1608-30N□	30/250	G,J,K	37/250	32.9	69	41.7	59.7	2250	0.220	600	Brown
SI1608-33N□	33/250	G,J,K	40/250	35.7	61.6	47.4	50.4	2300	0.220	600	White
SI1608-36N□	36/250	G,J,K	37/250	39.5	64	50.9	59.8	2080	0.250	600	Red
SI1608-39N□	39/250	G,J,K	40/250	42.7	61.2	58.4	47.6	2200	0.260	600	Black
SI1608-43N□	43/250	G,J,K	38/250	47.2	62.5	64.2	53.1	2000	0.280	600	Orange

CHARACTERISTICS

**RoHS
COMPLIANT**

ITEM P/N	SI1608-SERIES	TEST INSTRUMENT	Agilent4291B / 4338B
PRODUCT	High Frequency SMD Inductor	TEST FREQUENCY	250 MHz / 0.1V

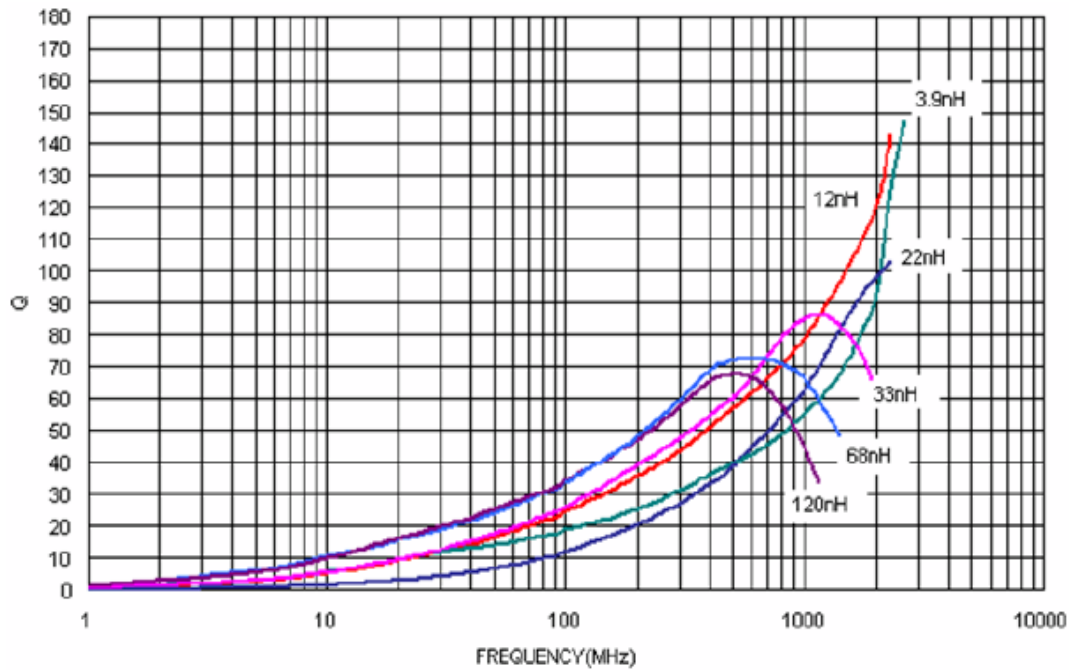
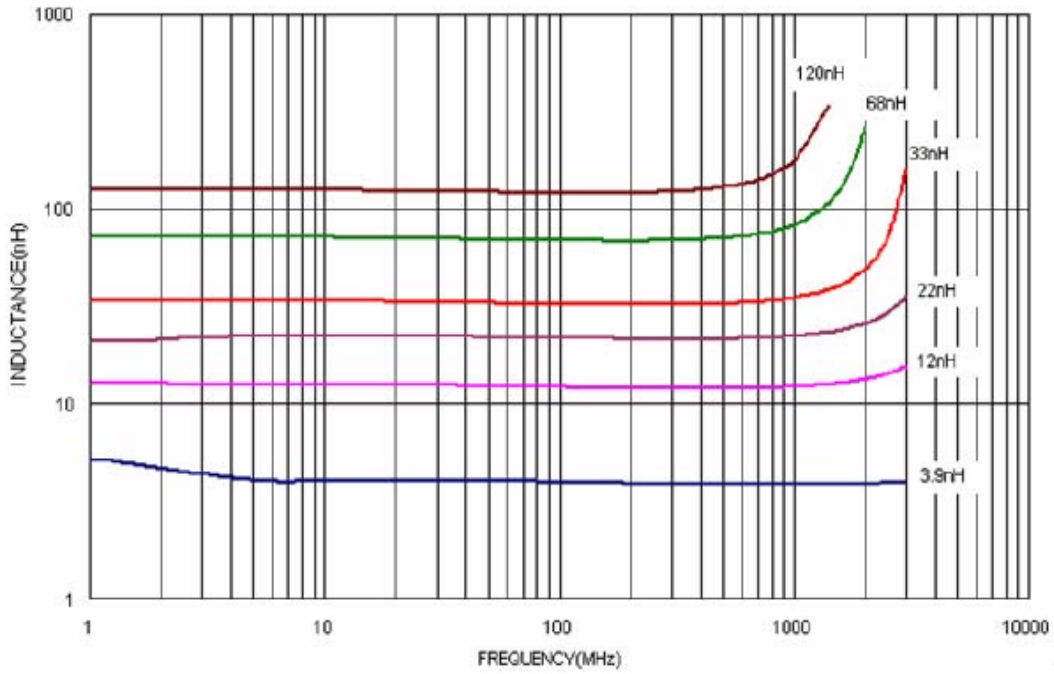
ELECTRICAL CHARACTERISTICS

HUNGTRON	Inductance	Inductance	Q/MHz	900MHz		1.7GHz		SRF	DCR	I _{rms}	Color
Part Number	(nH)/MHz	Tolerance	Min.	L typ	Q typ	L typ	Q typ	(Min.) MHz	(Ω) Max	(mA) Max.	Coding
SI1608-47N□	47/200	G,J,K	38/200	51.8	53	77	39.2	2000	0.28	600	Brown
SI1608-51N□	51/200	G,J,K	38/250	59.3	51	104	23.6	2130	0.3	600	Violet
SI1608-56N□	56/200	G,J,K	38/200	64.4	51.5	108	28.8	1900	0.31	600	Red
SI1608-62N□	62/200	G,J,K	37/200	73.3	42.7	157	16.2	1800	0.33	600	Gray
SI1608-68N□	68/200	G,J,K	37/200	80.2	44.3	174	18.3	1700	0.34	600	Orange
SI1608-72N□	72/150	G,J,K	34/150	86.7	41.1	213	15.6	1700	0.49	400	Yellow
SI1608-79N□	79/150	G,J,K	34/150	87	44.2	—	—	1700	0.5	400	White
SI1608-82N□	82/150	G,J,K	34/150	101	37.9	301	11.8	1700	0.54	400	Green
SI1608-91N□	91/150	G,J,K	34/150	112	49.4	—	—	1500	0.56	400	Brown
SI1608-R10□	100/150	G,J,K	34/150	127	36.1	—	—	1400	0.58	400	Blue
SI1608-R11□	110/150	G,J,K	32/150	147	34.6	—	—	1350	0.61	300	Violet
SI1608-R12□	120/150	G,J,K	32/150	167	28.6	—	—	1300	0.65	300	Gray
SI1608-R13□	130/150	G,J,K	32/150	180	36.9	—	—	1200	0.75	280	Orange
SI1608-R15□	150/150	G,J,K	28/150	235	21.9	—	—	990	0.92	280	White
SI1608-R17□	170/100	G,J,K	25/100	228	35	—	—	990	1.15	240	Yellow
SI1608-R18□	180/100	G,J,K	25/100	289	19.9	—	—	990	1.25	240	Black
SI1608-R19□	190/100	G,J,K	25/100	279	30.8	—	—	990	1.35	200	Green
SI1608-R20□	200/100	G,J,K	25/100	—	—	—	—	990	1.5	200	Orange
SI1608-R22□	220/100	G,J,K	25/100	—	—	—	—	900	1.6	250	Brown
SI1608-R24□	240/100	G,J,K	25/100	—	—	—	—	900	1.9	200	Violet
SI1608-R27□	270/100	G,J,K	24/100	—	—	—	—	900	2	170	Red
SI1608-R33□	330/100	G,J,K	25/100	—	—	—	—	900	2.75	100	Blue
SI1608-R34□	340/100	G,J,K	25/100	—	—	—	—	900	2.9	100	Gray
SI1608-R39□	390/100	G,J,K	25/100	—	—	—	—	900	3.15	100	Yellow
SI1608-R47□	470/100	G,J,K	25/100	—	—	—	—	750	4	80	Green

ITEM P/N	SI1608-SERIES	TEST INSTRUMENT	Agilent4291B / 4338B
PRODUCT	High Frequency SMD Inductor	TEST FREQUENCY	250 MHz / 0.1V

PERFORMANCE CURVES

Characteristics(L,Q vs. Frequency)



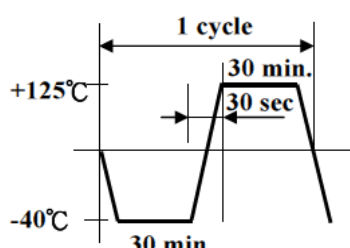
ITEM P/N	SI1608-SERIES	TEST INSTRUMENT	Agilent4291B / 4338B
PRODUCT	High Frequency SMD Inductor	TEST FREQUENCY	250 MHz / 0.1V

Reliability and Test Condition

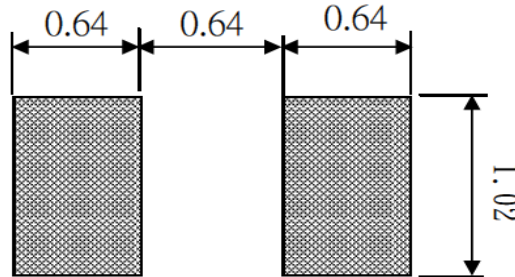
Item	Specifications	Test conditions
Solderability	The metalized area must have 90% minimum solder coverage.	Dip pads in flux and dip in solder pot(96.5 Sn/3.5 Ag solder) at 255°C ±5°C.
Resistance to soldering heat	There must be no case deformation or change in dimensions. Inductance must not change more 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.

ITEM P/N	SI1608-SERIES	TEST INSTRUMENT	Agilent4291B / 4338B
PRODUCT	High Frequency SMD Inductors	TEST FREQUENCY	250 MHz / 0.1V

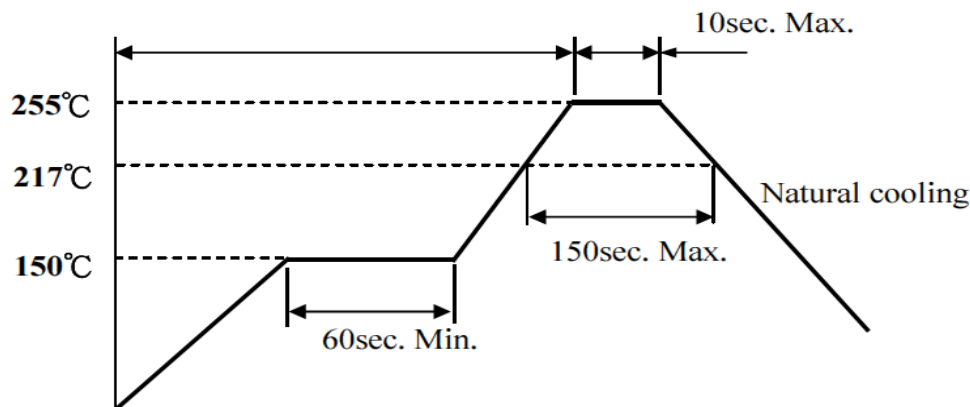
Reliability and Test Condition

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:  Measure the test items after leaving the inductors at room temperature and humidity for 2 hours.

ITEM P/N	SI1608-SERIES	TEST INSTRUMENT	Agilent4291B / 4338B
PRODUCT	High Frequency SMD Inductor	TEST FREQUENCY	250 MHz / 0.1V

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

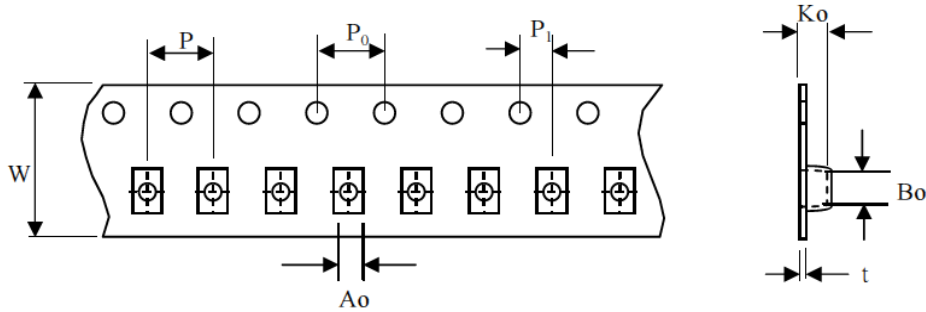
- 1 Operating temperature range : Ceramic Series :-40~+125°C
- 2 Storage condition : Temperature 20°~25°C , Relative Humidity 40%~60%
- 3 Recommended wire wound inductors should be used within 6 months from the time of delivery.

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ITEM P/N	SI1608-SERIES	TEST INSTRUMENT	Agilent4291B / 4338B
PRODUCT	High Frequency SMD Inductor	TEST FREQUENCY	250 MHz / 0.1V

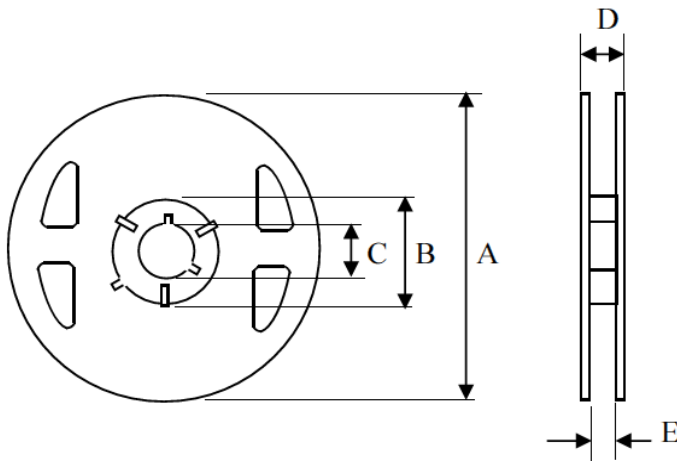
Packaging

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

Tape dimensions

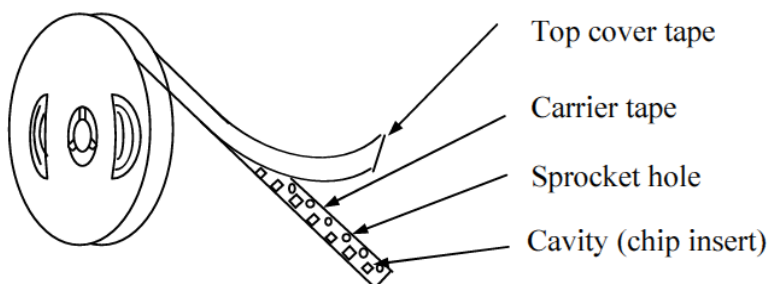
(Dimensions in mm; Tolerance : ±0.1)

Symbol	W	P	P ₀	P ₁	A ₀	B ₀	K ₀	t
Dimension	8	4	4	2	1.3	1.8	1.1	0.22

Reel dimensions

(Dimensions in mm)

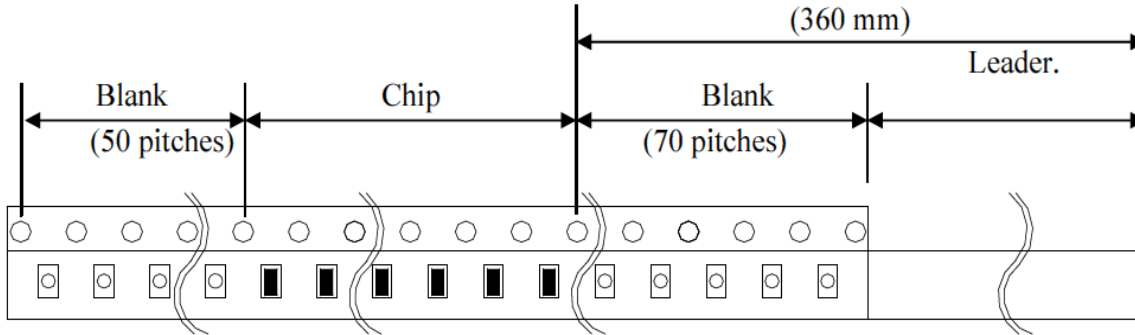
Symbol	T
A	180
B	60
C	13
D	14.4
E	8.4

Tapping figure

ITEM P/N	SI1608-SERIES	TEST INSTRUMENT	Agilent4291B / 4338B
PRODUCT	High Frequency SMD Inductor	TEST FREQUENCY	250 MHz / 0.1V

Packaging Form

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



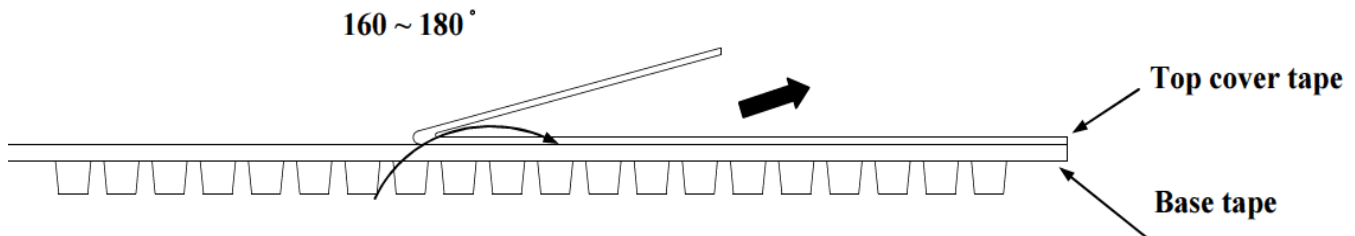
Cover Tape Peel Strength

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