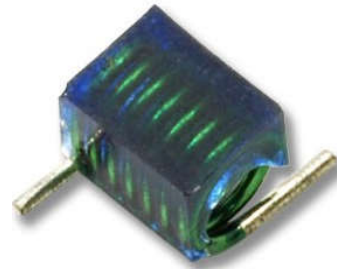


## Features:

- ◆RoHS Compliant
- ◆High Performance,Low Cost
- ◆Miniature Scale ,Maximum Q
- ◆Suitable for High frequency applications
- ◆Easy Bonding and low sensitivity against humidity

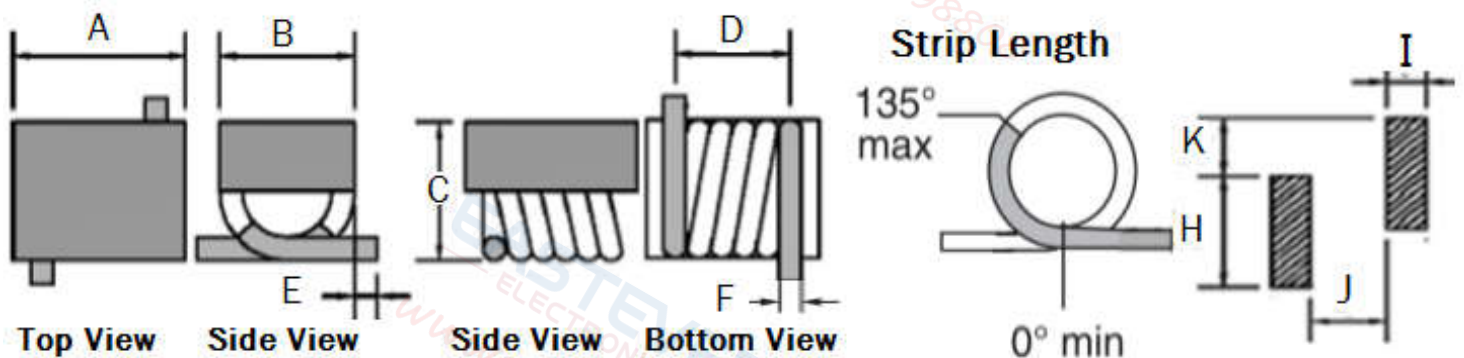


## Applications:

- ◆Power amplifier,antenna module,voltage controlled oscillator,and the mobile phone,such as GSM CDMA and PDC.
- ◆Digital TV tuner,wireless LAN and Bluetooth equipment etc.

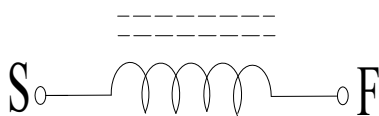
## Dimension Diagram:

## Recommended Land Pattern:



A=4.80±0.20 B=3.80±0.20 C=3.60±0.20 D=4.30±0.20 E=1.00±0.30  
 F=0.35±0.05 H=5.00±0.10 I=1.20±0.10 J=3.10±0.10 K=2.50±0.10

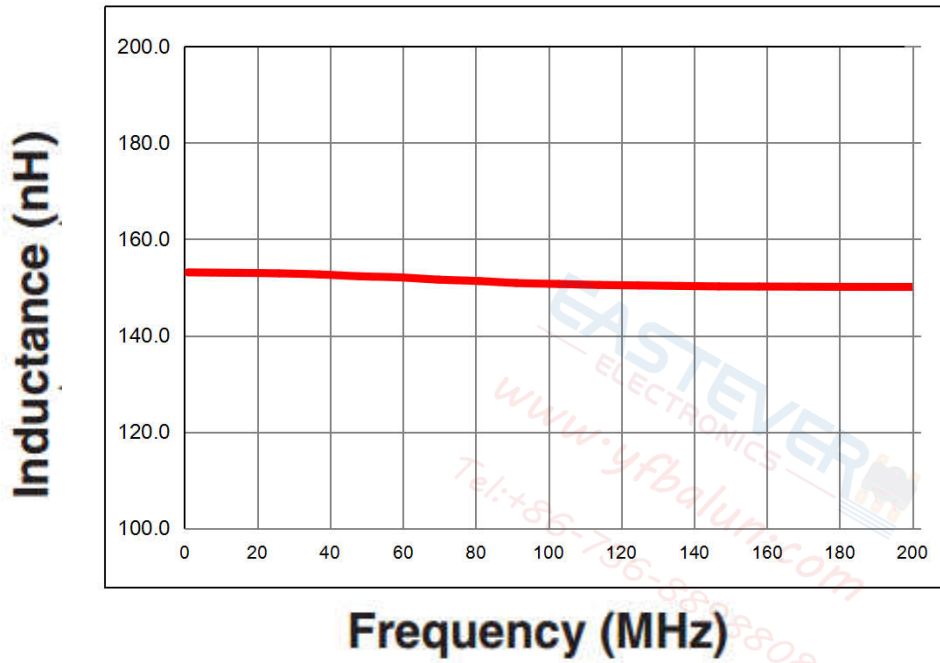
## Electrical Structure :



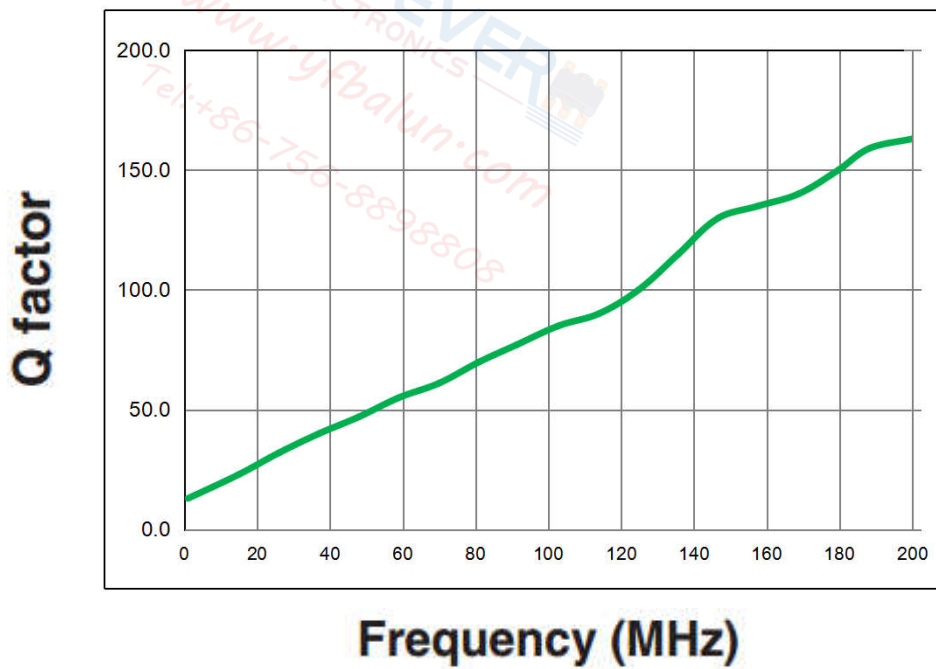
## Electrical Requirements:

- Inductance : 150.0nH±2%
- IDC : 1.20A Max
- DCR : 35.0mΩ Max
- SRF : 700MHz Min
- Q : 100.0 Min
- Frequency : 150MHz

Typical L vs Frequency :



Typical Q vs Frequency:

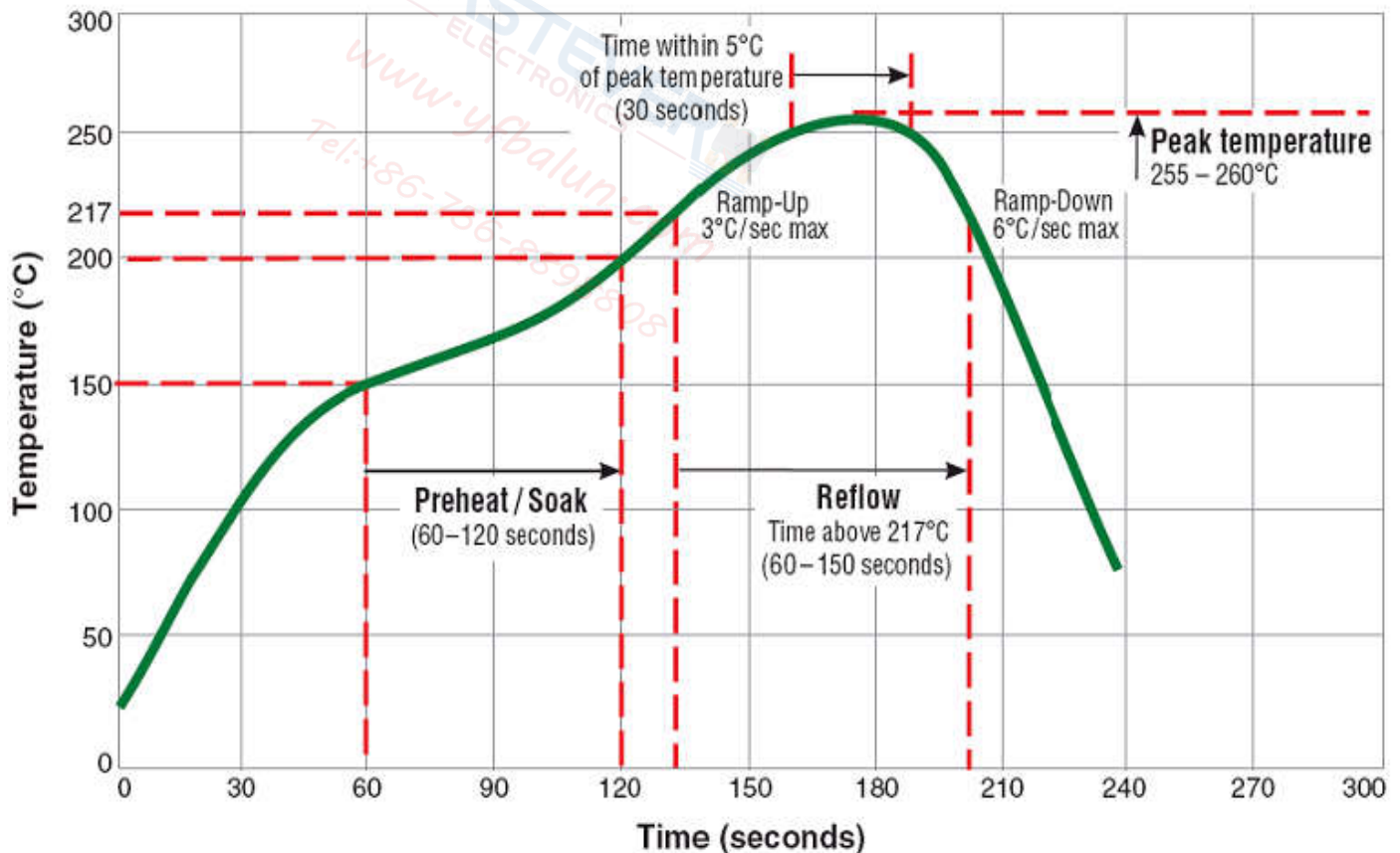


**SAMPLE INSPECTION REPORT:**

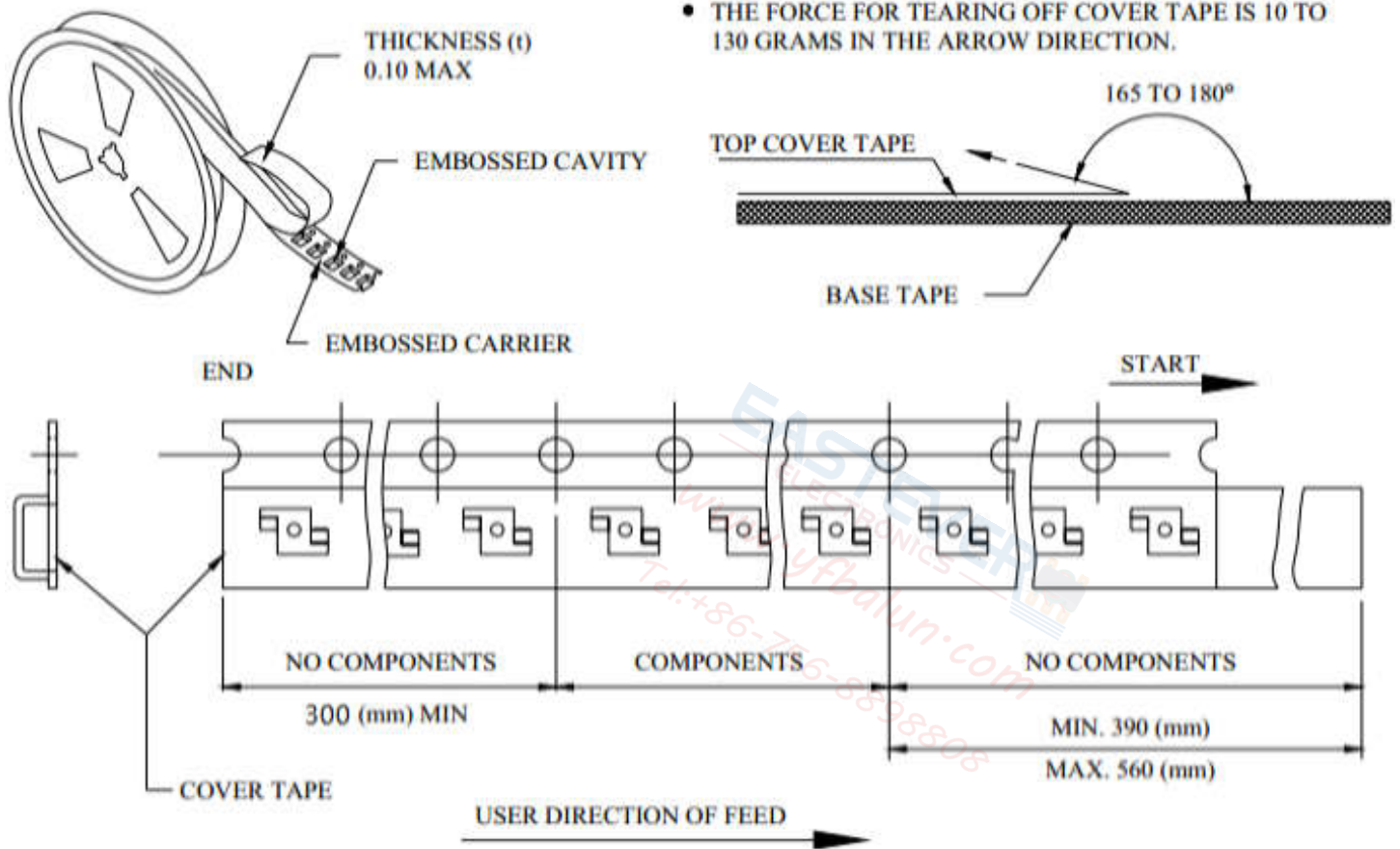
ITEM	L(150MHz)	Q(150MHz)	DCR	A	B	C	D	E	F
SPEC	150nH±2%	100.0	35.0mΩ	4.8±0.2	3.8±0.2	3.6±0.2	4.3±0.2	1.0±0.3	0.35±0.05
MAX	147.0		35.00	5.00	4.00	3.80	4.50	1.30	0.40
MIN	153.0	100.0		4.60	3.60	3.40	4.10	0.70	0.30
1	151.3	132.5	18.20	4.82	3.90	3.51	4.32	1.00	0.37
2	150.6	133.5	18.28	4.80	3.90	3.54	4.35	1.05	0.36
3	150.3	132.2	18.18	4.80	3.82	3.52	4.26	1.04	0.38
4	151.1	135.0	18.27	4.79	3.82	3.50	4.31	1.04	0.37
5	150.5	134.0	18.27	4.80	3.80	3.48	4.31	1.02	0.38
6	150.8	136.0	18.26	4.84	3.84	3.50	4.35	1.05	0.36
7	151.5	133.0	18.35	4.84	3.84	3.49	4.35	1.03	0.35
8	150.8	132.0	18.34	4.80	3.82	3.50	4.27	1.05	0.37
9	150.4	131.0	18.24	4.81	3.82	3.51	4.33	1.01	0.36
10	151.9	133.0	18.36	4.82	3.90	3.52	4.32	1.02	0.37
$\bar{X}$	150.920	133.022	18.275	4.812	3.846	3.507	4.317	1.031	0.367
R	1.600	5.000	0.180	0.050	0.100	0.060	0.090	0.040	0.030
JUD	OK	OK	OK	OK	OK	OK	OK	OK	OK

**RECOMMENDED REFLOW PROFILE GRAPH:**

## Typical RoHS Reflow Profile

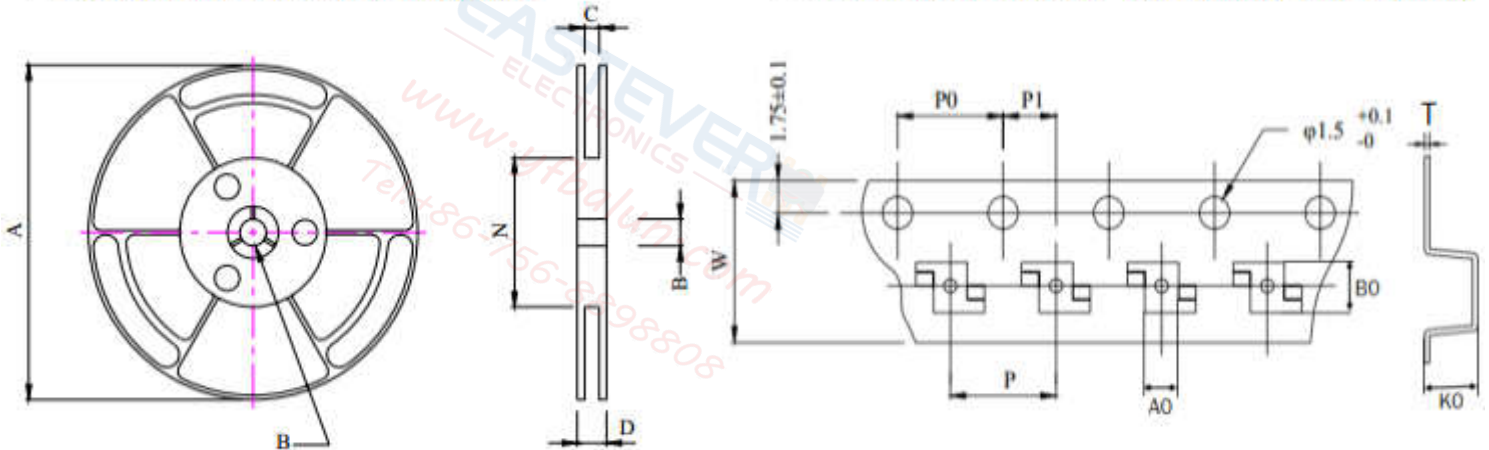


### Packging Dimension For Caeier Tape:

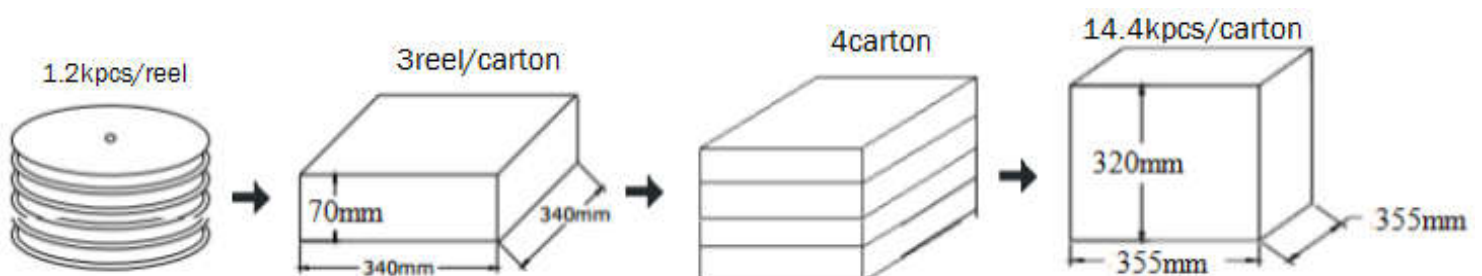


#### ■ CARRIER TAPE REELS (mm)

#### ■ DIMENSIONS OF CARRIER TAPE (mm)



A	B	C	D	N	W	P	P0	P1	T	A0	B0	K0
340	13.0	16.5	25.5	100	16.0	12.0	4.0	6.0	0.5	4.2	5.5	4.2
Max	±0.5	±0.5	±0.5	Ref	±0.3	±0.1	±0.1	±0.1	±0.1	±0.2	±0.2	±0.2



**RELIABILITY TEST:****ELECTRICAL PERFORMANCE TEST**

Inductance	REFER TO STANDARD ELECTRICAL CHARACTERISTIC LIST.	HIOKI3535 LCR HITESTER
D C R		HIOKI3535 LCR HITESTER
Q		HIOKI3535 LCR HITESTER
SRF		HP 8753D Network Analyzer

**MECHANICAL PERFORMANCE TEST**

SOLDER HEAT RESISTNCE	PRODUCT SHOULD HAVE NO EVIDENCE OF ELECTRICAL AND MECHANICAL DAMAGE	PREHEAT:150°C 100s Max SOLDER: (Pb Free) SOLDER TEMPERATURE:260°C±5°C DIP TIME: 10s Max.
SOLDER ABILIT TEST	MORE THAN 90% OF TERMINAL ELECTRODE SHOULD BE COVERED WITH SOLDER.	PREHEAT:150°C 120s SOLDER: (Pb Free) SOLDER TEMPERATURE:245°C±5°C DIP TIME: 10s Max

**CLIMATIC TEST**

TEMPERATURE CHARACTERISTIC		(- 40°C ~ +85°C)
HUMIDITY TEST	1.APPEARANCE:NO DAMAGE 2.INDUCTANCE:WITHIN±10% OF INITIAL VALUE.	1.TEMPERATURE:60°C±2°C 2.HUMIDITY : 90-95%RH 3.APPLIED CURRENT: MAX RATED CURRENT 4. TIME: 96±2 HOURS 5. MEASURE AT ROOM TEMPERATURE AFTER PLACING FOR 24HRS
LOW TEMPERATURE STORAGE		1.TEMPERATURE:- 40°C±2°C 2.TIME: 96±2 HOURS 3.MEASURE AT ROOM TEMPERATURE AFTER PALCING FOR 24 Hrs
HIGH TEMPERATURE STORAGE		1.APPLIED CURRENT: MAX RATED CURRENT 2.TEMPERATURE:125°C±2°C 3.TIME: 96±2 HOURS 4.MEASURE AT ROOM TEMPERATURE AFTER PLACING FOR 24HRS.

**LIFE TEST**

HIGH TEMPERATURE LOAD LIFE TEST	PRODUCT SHOULD BE NO EVIDENCE OF SHORT OR OPEN CIRCUIT	1. TEMPERATURE: 125±2°C 2. TIME: 500±12 HOURS 3. LOAD: ALLOWED DC CURRENT
HUMIDITY LOAD LIFE TEST		1. TEMPERATURE: 60±2°C 2. R.H.: 90-95% 3. TIME: 500±12 HOURS 4. LOAD: ALLOWED DC CURRENT