⊕ Feature

- Terminals are high reliability by a spring structure.
- High Q and high senstvility due to optimaized magneticmaterial.
- Applicable to reflow soldering.

⊕ Applications

Receiving LF antenna coils for the in-car devices shown below.

- Tire - pressure monitaring system.
- Keyless entry system.

⊕ Product Identification :

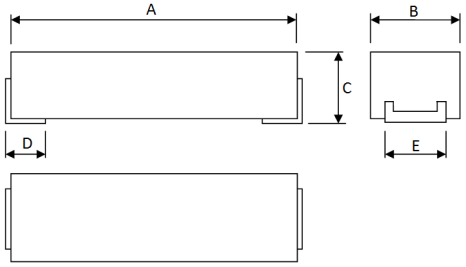
□□ □□□□ □ - □□□ □

1 2 3 4 5

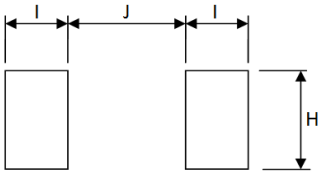
Series name	Dimensions(LxH)	Internal code
LC	1103	A
		B
		:
		S = Standard

Inductance		Tolerance	
1R0	1 µH	J	5%
100	10 µH	K	10%
101	100 µH	M	20%
102	1000 µH	N	30%

⊕ Shapes And Dimensions



⊕Recommended PCB Pattern



Part No.	Dimensions(mm)							
	A	B	C	D	E	H	I	J
LC1103A-722J	11.8 ±0.30	3.6 ±0.30	2.70 ±0.30	1.40 Ref	2.00 Ref	2.00 Ref	8.50 Ref	8.50 Ref

⊕ Electrical Characteristics :

Part No.	Inductance (mH)	Q	DCR (Ω)	Test Frequency
LC1103A-722J	7.2 ± 5%	30 ± 10%	80 Max	125KHz

⊕ Equivalent Circuit Schematic :

⊕ Material List :

No.	Location	Material
1	Core	Ferrite core
2	Wire	P180
3	Solder	Sn99.3 Cu0.7
4	-	-
5	-	-

1.Operating temperature -40℃ ~ +105℃

2.Storage conditions -40℃ ~ +105℃

旭創科技
RSiN Technology

Transponder Coils \ LC Type

TEST DATA FOR PREPRODUCTION SAMPLES

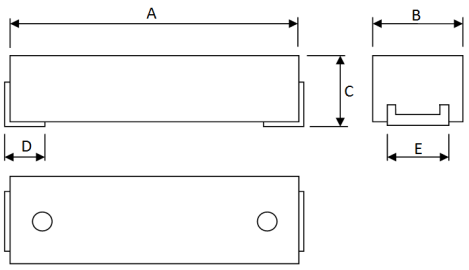
Customer		Test Date	2019-8-30		
RSiN Part No.	LC1103A-722J	Sample Quantity	5	PCS	
Lot No		Test Temp	25℃	Test Humidity	62%

MEAS Item	L (0A) (mH)	Q		DCR (Ω)	A (mm)	B (mm)	C (mm)	(mm)	(mm)		
SPEC	7.20	30.00	-	80.00	11.80	3.60	2.70			-	-
Upper	7.56	33.00	-	80.00	12.10	3.90	3.00	-	-	-	-
Lower	6.84	27.00	-	-	11.50	3.30	2.40	-	-	-	-
Tolerance	5%	10%	-	Max	0.30	0.30	0.30				
Test Freq.	125KHz									-	-
1	6.98	29.50		69.60	11.66	3.58	2.74				
2	7.02	29.80		70.20	11.68	3.54	2.80				
3	7.04	31.30		70.00	11.70	3.58	2.84				
4	7.17	31.20		70.40	11.68	3.58	2.78				
5	7.05	31.00		70.20	11.70	3.60	2.82				
6											
7											
8											
9											
10											
Average	46.50	30.56		70.08	11.68	3.58	2.80				
Max	7.17	31.30	0.00%	70.40	11.70	3.60	2.84			0.00	0.00
Min	6.98	29.50	0.00%	69.60	11.66	3.54	2.74			0.00	0.00
Range	0.19	1.80	0.00%	0.80	0.04	0.06	0.10			0.00	0.00
StDevP	0.06	0.76	#DIV/0!	0.27	0.01	0.02	0.03			######	######

Test Instrument

LCR	VR1153
DCR	VR1153
IDC	VR1153+VR7210

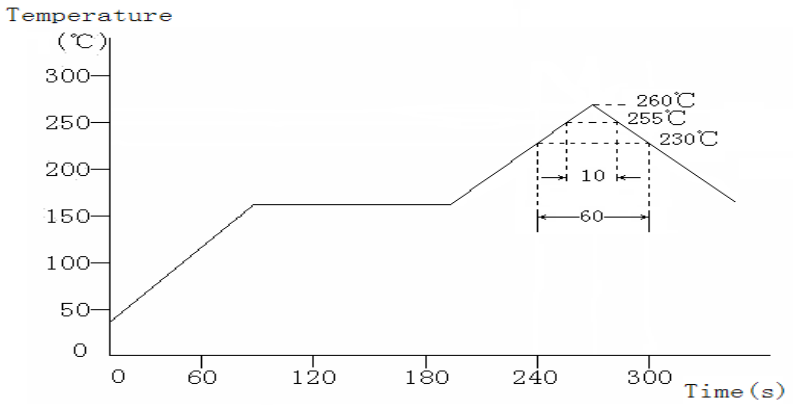
Configuration



Coil Spec：

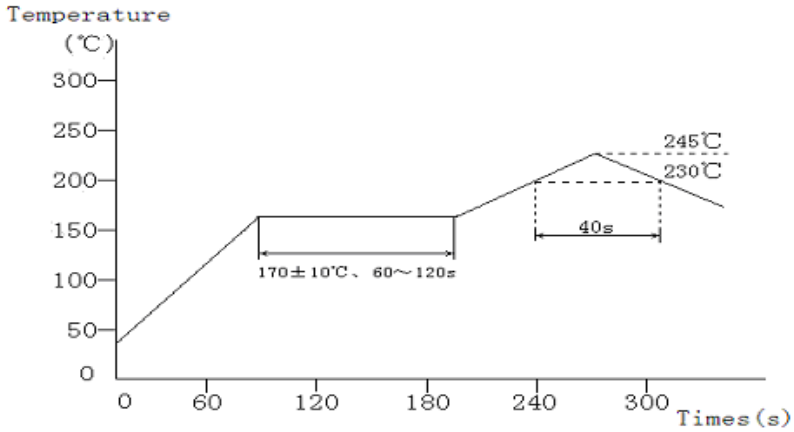
Drawn by	Checked by	Approved by
davy	amanda	Vincent

⊕ Reflow Soldering Heat Endurance



No mechanical and electrical defects are found after testing based on the above profile and keeping under the conditions of room temperature and humidity for 2 hours.
Twice reflow test is acceptable with the test interval remaining 1 hour under the normal conditions.
The reflow test profile may vary with the testing instruments.

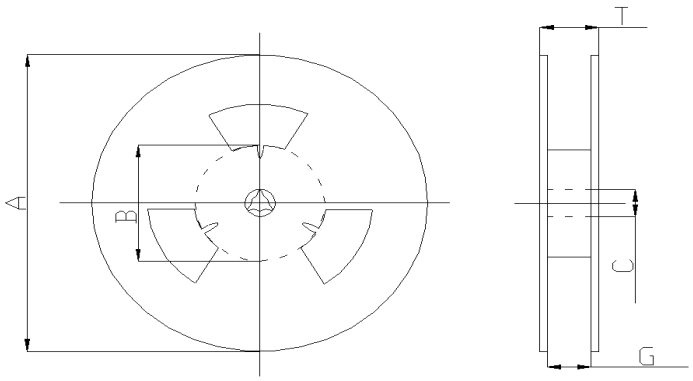
⊕ Recommended Reflow Conditions



The recommended reflow profile is based on the testing instruments used. Solder ability will depend on the testing equipments, reflow conditions, testing method, etc. So it is necessary to make a confirmation of them when the reflow conditions are set up.

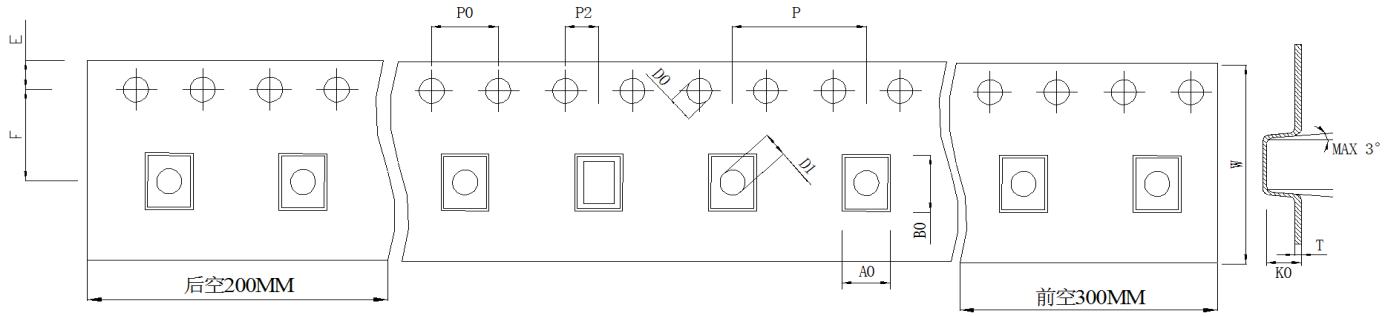
However halogen lamp shall be used, side heat will be beyond range of resistance heat, so we can't recommend it.

⊕Reel Dimension(m/m)



Item	A(mm)	B(mm)	C(mm)	G(mm)	T(mm)
13"x12	330	100	13	12.5	16.4

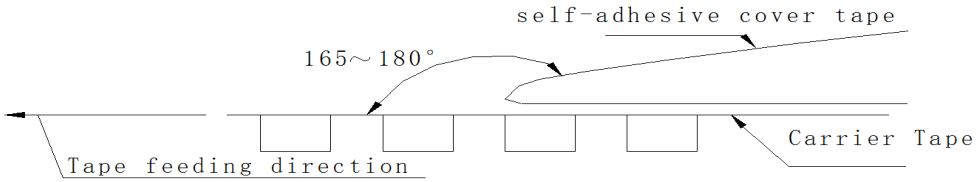
⊕Taping Dimension(m/m)



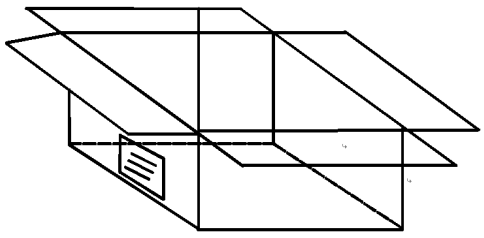
Item	W	A0	B0	K0	E	F	P	P0
12mm	12.0±0.3	5.4±0.1	6.0±0.1	3.3±0.1	1.75±0.1	5.5±0.1	8.0±0.1	4.0±0.1
	P2	D0	D1	T				
	2.0±0.1	1.5±0.1	1.5±0.3	0.3±0.05				

⊕Tape Peel off Strength

The force to tear off cover tape: 10~130g.f



⊕ Packaging Carton



Reel Packing Unit	Inner Box Packing Unit	Carton Packing Unit
2500 PCS / Reel	4500 PCS / Reel	9000 PCS / Box