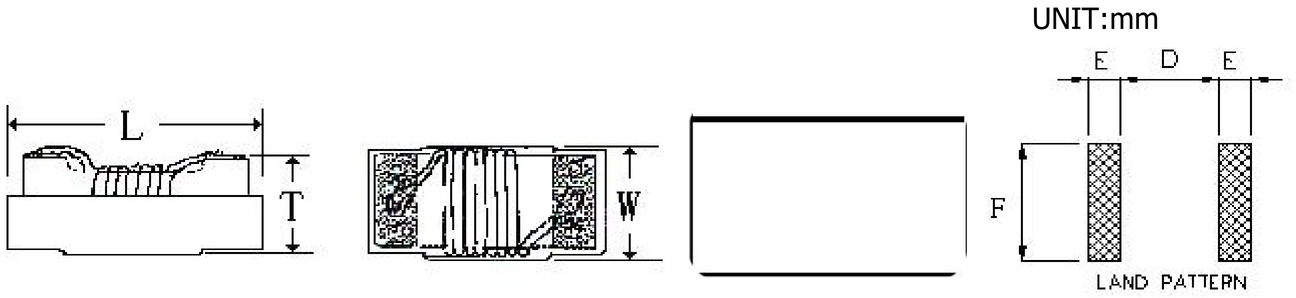
深圳市英拓坤科技有限公司
SHENZHEN YINTK ELECTRONICS CO., LTD

SPECIFICATIONS		DATE	2018年12月5日
CUSTOMER	客户	ITEM	YLFW0603-100K(f)
Q'TY.	数量	PART NO.	
TEMP	25℃	HUMIDITY	70%

1.SHAPE & DIMENSION



CODE	L	W	T	E	F	D	
DIMENSION	1.80MAX	1.25MAX	1.20MAX	0.64Typ.	1.02Typ.	0.64Typ.	

2. ELECTRICAL CHARACTERISTICS @25℃

ITEM	SPEC. RANGE	TEST CONDITION	TEST INSTRUMENTS
L (μH)	10±10%	2.5MHz	HP4286A
Q(品质系数)	14 MIN	2.5MHz	
DCR (Ω)	2.40 MAX		502BC
Irms (mA)	280 MAX		VR116+VR7210
SRF (MHz)	36 MIN		E5071C ENA

3. PART NUMBERING SYSTEM

YLFW	0603	-	100	K	(F)
①	②		③	④	⑤

① Product symbol系列代号：
② Dimensions 尺寸：Length长（L）×Width宽（W）
③ Inductance电感量：47：4.7uH； 100：10μH； R68：680nH；
④ Tolerance允许偏差：J±5%，K±10%,M±20%
⑤ Lead free products无铅产品

4.GENERAL SPECIFICATION

a. Storage temp.: -40℃ ~ +85℃,R.H.: 30% ~ 70%,Operating temp.: -40℃~ +85℃.

b. Moisture sensitivity level (MSL) 2 (1 year floor life at ＜30℃/85% relative humidity).

c.Failures in time(FIT)/Mean Time Between Failures(MTBF) 38 per billion hours/26,315,789 hours,calculated per Telcordia SR-332.

APPROVED BY	CHECKED BY	DRAFT
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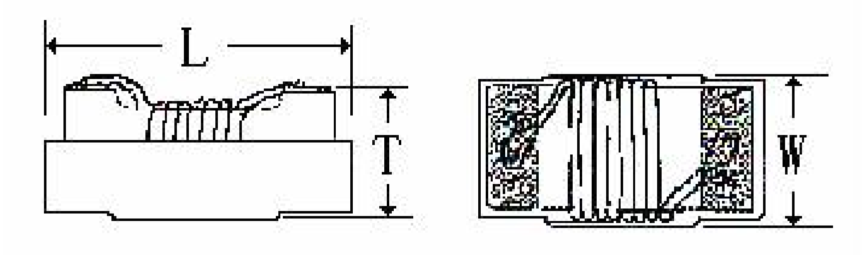
5. TEST DATA FOR SAMPLES

TEST ITEM	L	Q(品质系数)	DCR	L	W	T	
	(μH)	(min)	(Ω)	(mm)	(mm)	(mm)	
CON.	2.5MHz	2.5MHz	At 25°C	1.80MAX	1.25MAX	1.20MAX	
SPEC.	10±10%	14 MIN	2.40 MAX				
1	10.13	16.0	1.90	1.71	1.16	1.11	
2	9.88	18.0	1.92	1.69	1.15	1.13	
3	9.96	17.0	1.91	1.72	1.17	1.12	
4	10.11	16.0	1.90	1.71	1.17	1.13	
5	9.89	16.0	1.90	1.71	1.15	1.11	
6	10.16	18.0	1.92	1.69	1.16	1.13	
7	9.92	17.0	1.91	1.72	1.17	1.12	
8	9.92	16.0	1.91	1.70	1.15	1.11	
9	10.11	18.0	1.90	1.71	1.16	1.12	
10	9.89	17.0	1.92	1.69	1.17	1.13	
X	10.00	16.90	1.91	1.71	1.16	1.12	
R	0.28	2.00	0.02	0.03	0.02	0.02	

图示:



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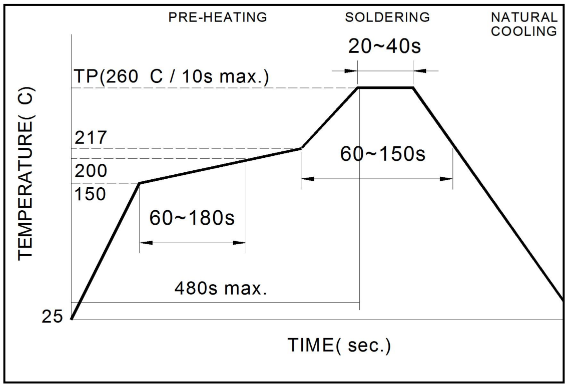
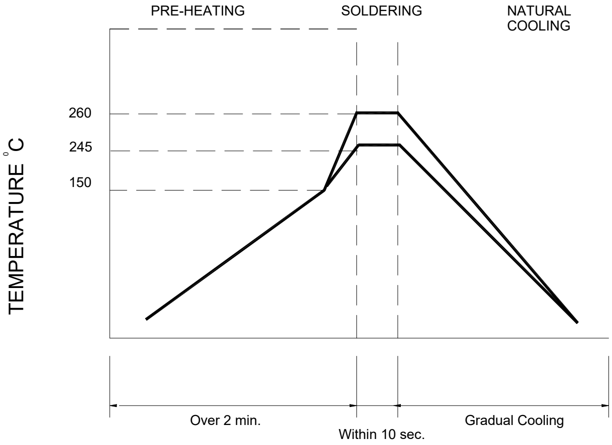
6. SOLDERING CONDITIONS

Figure 1.
Re-flow Soldering (Lead Free)



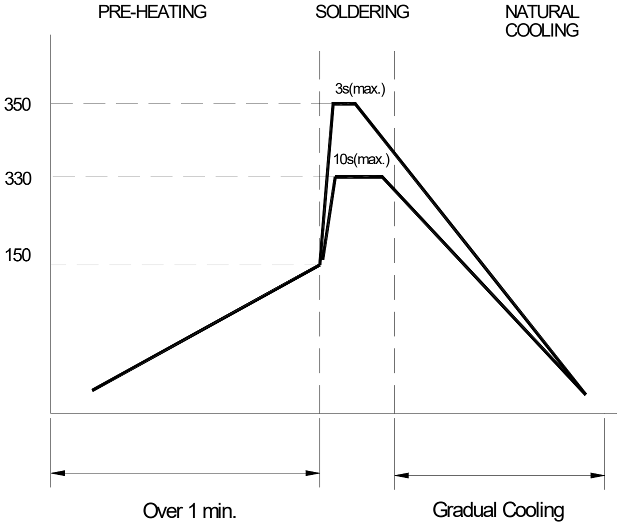
Note:
·Preheat circuit and products to 150℃
·260℃ tip temperature (max)

Figure 2.
Wave Soldering



Note:
·Never contact the ceramic with the iron tip
·1.0mm tip diameter (max)

Figure 3.
Hand Soldering



Note:
·Use a 20 watt soldering iron with tip diameter of 1.0mm
·Limit soldering time to 3 sec.

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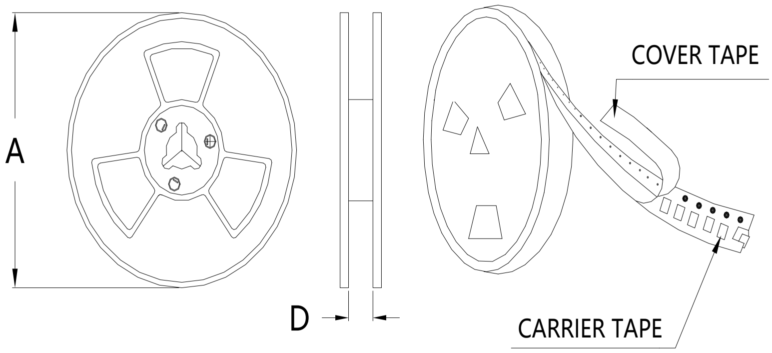
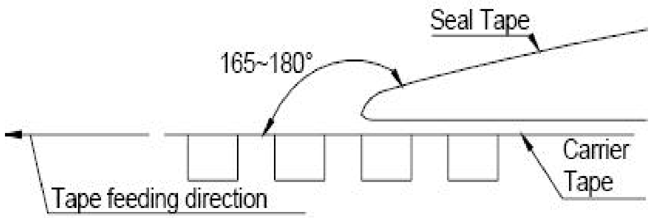
7. PACKAGING(unit: mm)

1.包装类型：编带装　　2.包装尺寸： □ 13″ 盘　☑ 7″ 盘



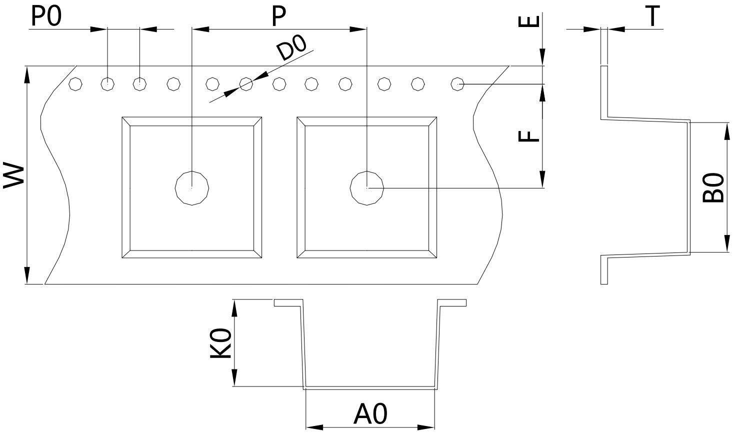
	13″ 盘	7″ 盘
A	Φ330±2.0	Φ178±2.0
D	8.5	

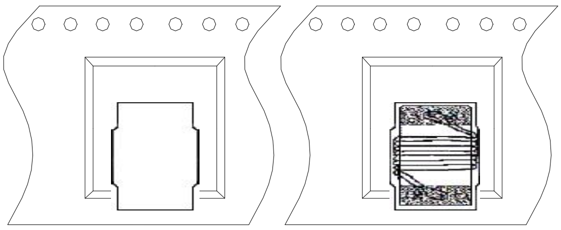


Peel-off strength:10～100gf.

Peel-off angle:165°-180°

Peel-off speed:300mm/min.





产品摆放方向顶视图　　底视图

Item	W	A0	B0	K0	P	T	E	F	D0	P0		
DIM(mm)	8.0±0.2	1.15±0.15	1.83±0.15	0.95±0.1	4.0±0.1	0.30±0.05	1.75±0.1	3.5±0.1	1.5±0.1	4.0±0.1		

3.包装数量: 4000 PCS / 卷

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8. 1 RELIABILITY TEST

TEST ITEM	SPECIFICATION	TEST CONDITION
Rating current	According to product specifications	Current sources:33010D
Inductance	According to product specifications	Test Frequency:0.252~250MHz Test Equipment:HP4291A、HP4286A、HP4287A、HP4284A Test Fixture:16193Aor16334A
Q	According to product specifications	Test Frequency:0.252~1500MHz Test Equipment:HP4291A、HP4286A、HP4287A、Test Fixture:16193Aor16334A
RDC	According to product specifications	Test Equipment:HP4263B
SRF	According to product specifications	Test Equipment:HP4291A Test Fixture:16193A
Solderability	The metalized area must have more then 90%of solder coverage	Soldering Temp:230±5°C Dipping time:5±1S
Resistance to soldering heat	No evidence of mechanical damage The mealized arer must have more then 75%of solder coverage Inductance change,less than±5% Q change less than±10%	Soldering Temp:260±5°C Dipping time:10±1S
Thermal Shock	No evidence of mechanical damage, Inductance change less than±5%, Q change less than±10%	A cycle contain:Step1:-40℃，30Min Step 2:85℃，30Min Cycle Times:10

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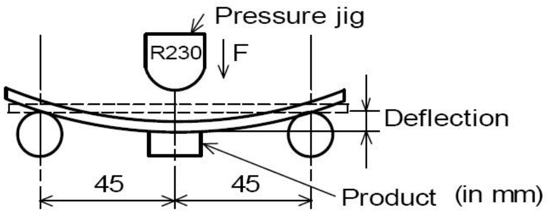
8.2 RELIABILITY TEST

TEST ITEM	SPECIFICATION	TEST CONDITION
High Temperature Storage	No evidence of mechanical damage, Inductance change less than±5%, Q change less than±10%	Test Temperature:125±2℃(Ceramic core)85±2℃(Ferrite core) Test Time:96±2Hours
Low Temperature Storage	No evidence of mechanical damage, Inductance change less than±5%, Q change less than±10%	Test Temperature:-40±2℃ Test Time:96±2Hours
Moisture Resistance	No evidence of mechanical damage, Inductance change less than±5%, Q change less than±10%	Test Temperature:50±2℃ Test Time:100Hours relative humidity:90~95%
Vibration	No evidence of mechanical damage, Inductance change less than±5%, Q change less than±10%	Amplitude:1.5mm X、Y、Z each direction for 1Hour and 45min Frequency range:10~55~10Hz(min)
Component Adhesion	No evidence of mechanical damage No evidence of peel off or broken Keep coutinuity of Winding	Force:2Kg Test Time:5±1sec
Resistance to bend	No evidence of mechanical damage	Camber:20mm Test Board:Glass-Epoxy board Thickness:8mm 
Life	No evidence of mechanical damage, Inductance change less than±5%, Q change less than±10%	Test Temperature:85±2℃ Test Time:1000Hours with rating current

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