

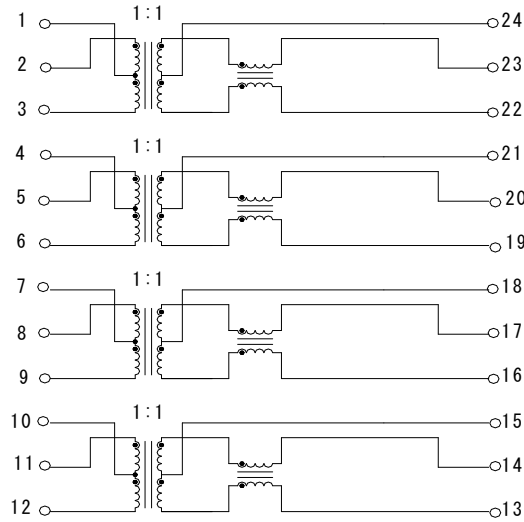
1. FEATURES:

- 1.1 Compatible with various 10/100/1000M Base-TX transceiver requiring 1:1 transmit and receive turns ratio
- 1.2 Compliant with IEEE 802.3 standard including baseline wander compensation specification of 350uH OCL when Biased at 8mA from @25°C (Current Per Pair 350 mA)
- 1.3 Low profile Surface Mount Packaging designed for Hi-Temp Reflow Process(250°C peak)
- 1.4 Single channel interface for 10/100/1000M bps Ethernet applications with CMC's tuned to Enhance EMC system performance
- 1.5 Operating Temperature range:-40°C to +85°C

2.ELECTRICAL SPECIFICATIONS @25°C

- 2.1 OCL : 350 uH Min. @ 100 KHz, 100mV with 8mA DC Bias
- 2.2 Leakage Inductance: 0.5 uH Max. @ 100KHz, 0.1V
- 2.3 Cw/w: 28 pF Max. @ 100KHz, 0.1V
- 2.4 DCR: 1.20Ω Max.
- 2.5 Turns Ratio(±5%): 1CT:1CT(TX), 1CT:1CT(RX)
- 2.6 Insertion Loss: -1.0 dB Max. @ 1-100MHz
- 2.7 Return Loss: -18 dB Min. @ 1-30MHz
 - 14.4 dB Min. @ 40MHz
 - 13.1 dB Min. @ 50MHz
 - 12 dB Min. @ 60-80MHz
 - 10 dB Min. @ 100MHz
- 2.8 Cross Talk: -42 dB Min.@ 1-30 MHz
 - 40 dB Min.@ 60 MHz
 - 38 dB Min.@ 80-100MHz
- 2.9 D.C.M.R : -40dB Min.@ 1-30 MHz
 - 35 dB Min.@ 60 MHz
 - 30dB Min.@ 100 MHz
- 2.10 Isolation HI-POT: 1500Vrms 1mA 1Second

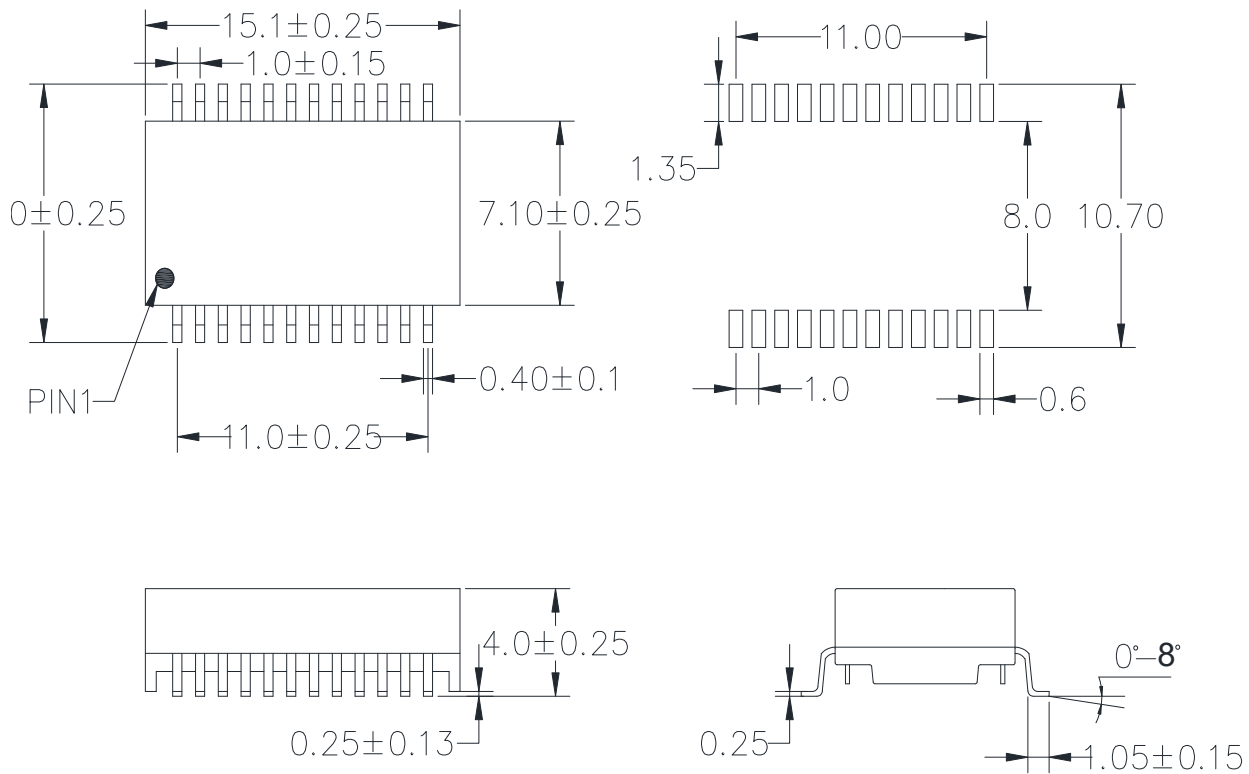
SCHEMATICS:



MECHANICAL:

(Units: mm)

SUGGESTED PCB LAYOUT:



Material List

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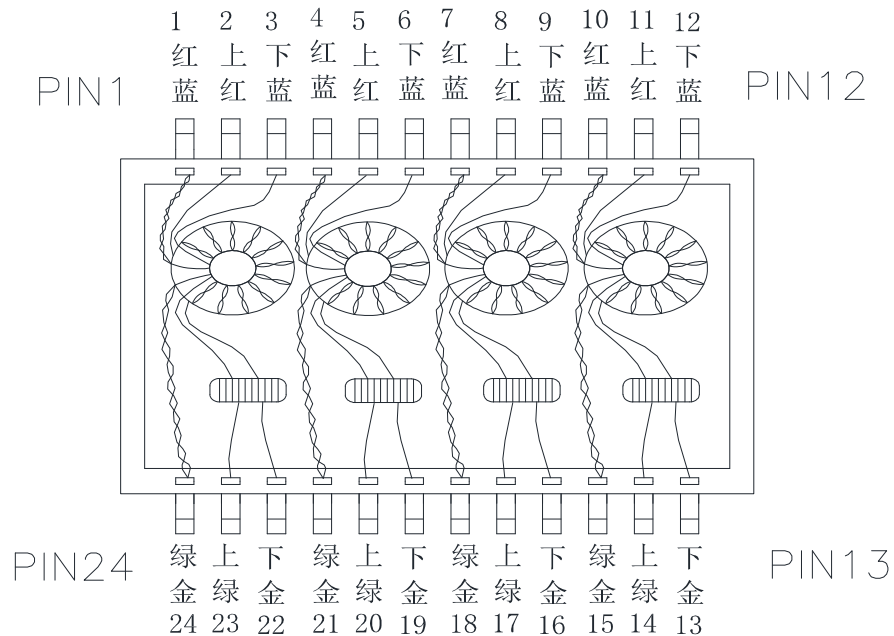
Main Material:

NO	材料	供应商型号	材质	厂商	UL.NO
1	外壳	小 24PIN*15.1	DAP8100		
2	T1 CORE	T2.7*1.42*2.06 PN	IM5KB (宽温)		
3	T2 CORE	T2.3*1.40*0.76 PN	IN851		
4	胶水	E57A	凡立水		
5	铜线	QPN180(H 级) 0.09 R/G/N/B	QPN180(H 级)		
6	锡	SNAG0.3-CU0.7 无铅锡	Sn99-Cu0.7-AG0.3		

绕线流程:

NO	磁芯规格	铜线扭线	圈数	层数	分布角度	备注
T1 件	2.7*1.42*2.06 PN	QPN180 四散线 0.09mm 扭线(5-6 节/cm)	12Ts	1Layer	350°	四色绞线并绕铁芯，平均分布 350°排线一层。
T2 件	T2.3*1.40*0.76 PN	QPN180 0.09mm 二散线扭线 (7-9 节/cm)	11Ts	1Layer	330°	双线绞线并绕铁芯，平均分布 330°排线一层。

线包摆线图:



Sample Test Report

Sample Test Report								
测试项目	OCL				Leakage Inductance			
测试条件	100 KHz, 0.1V @ 8mA DC Bias				100 KHz, 0.1V			
使用设备	TYD2879							
测试规格	350 uH				0.5uH			
容许误差	Min.				Max.			
脚位	2-3	5-6	8-9	11-12	2-3	5-6	8-9	11-12
1	450	470	532	510	0.11	0.11	0.12	0.11
2	498	590	520	550	0.11	0.11	0.12	0.11
3	460	485	500	502	0.12	0.12	0.11	0.12
4	495	521	552	543	0.12	0.11	0.11	0.11
5	580	456	471	560	0.12	0.12	0.12	0.11
6	448	483	501	556	0.11	0.12	0.12	0.11
7	508	513	487	495	0.11	0.11	0.12	0.12
8	503	543	490	500	0.12	0.12	0.12	0.11
9	496	522	486	480	0.12	0.12	0.11	0.11
10	510	534	527	563	0.12	0.10	0.19	0.13
判定	pass	pass	pass	pass	pass	pass	pass	pass

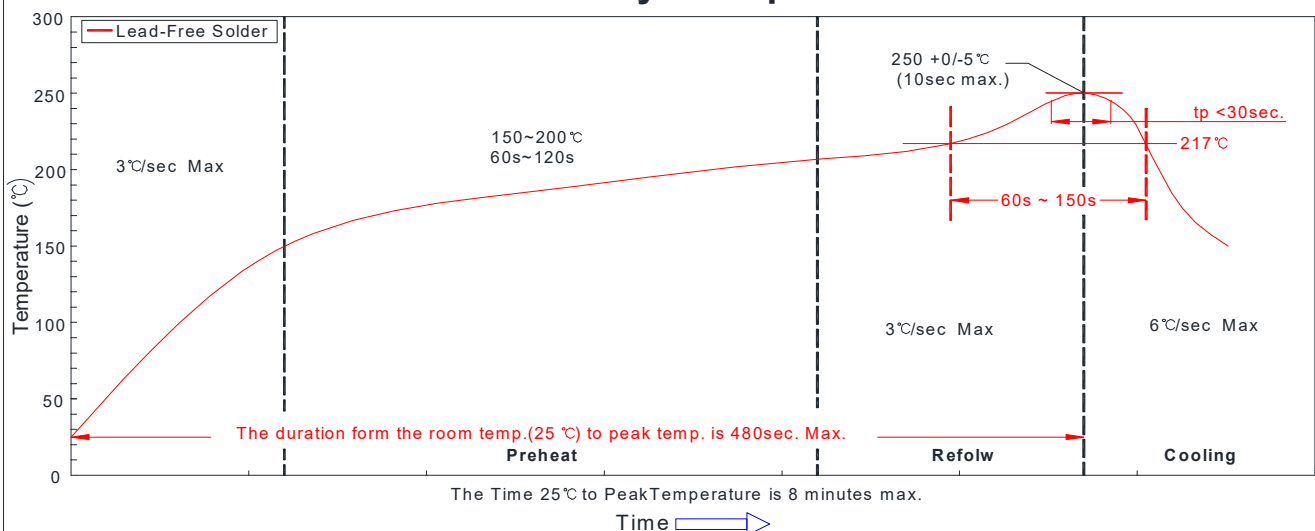
Sample Test Report

测试项目	CW/W				DCR			
测试条件	100 KHz, 0.1V				@25°C			
使用设备	TYD2879							
测试规格	28pF				1.2Ω			
容许误差	Max.				Max.			
脚位	2-23	5-20	8-17	11-14	2-3	5-6	8-9	11-12
1	15.8	16.9	15.2	16.3	0.45	0.46	0.45	0.46
2	17.9	16.9	15.4	17.4	0.45	0.46	0.45	0.46
3	20.1	19.8	14.5	19.8	0.45	0.46	0.45	0.46
4	15.8	17.9	15.5	16.5	0.45	0.46	0.45	0.46
5	17.9	16.5	15.8	14.8	0.46	0.46	0.46	0.45
6	15.9	16.6	17.4	14.5	0.46	0.46	0.45	0.45
7	14.8	14.8	17.7	15.5	0.45	0.46	0.45	0.45
8	17.1	16.9	15.6	17.9	0.44	0.45	0.45	0.46
9	18.1	15.8	16.8	17.8	0.45	0.45	0.46	0.44
10	16.2	17.5	15.5	14.8	0.43	0.45	0.46	0.43
分項判定	pass	pass	pass	pass	pass	pass	pass	pass

Recommended Reflow Soldering curve

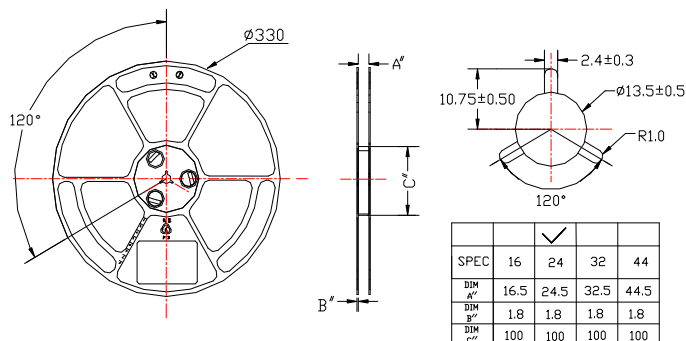
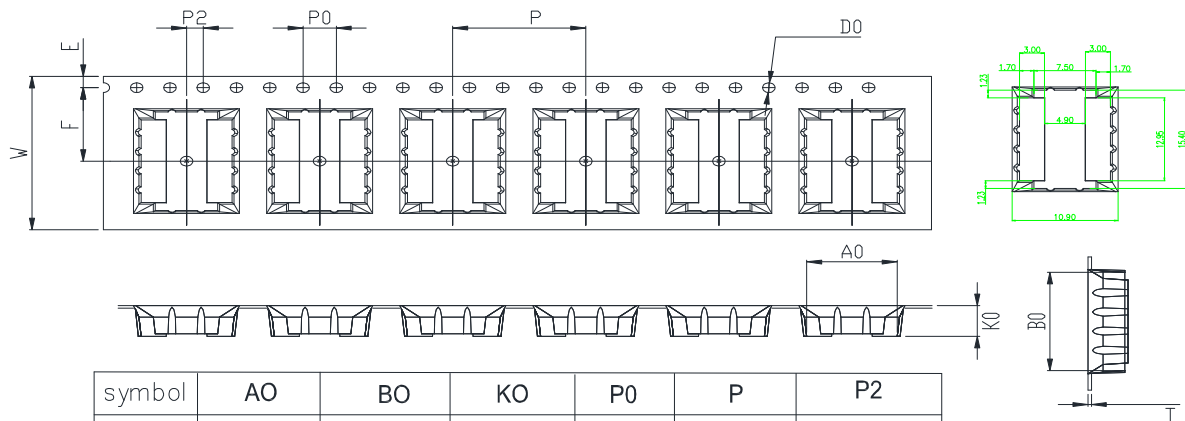
Profile Feature	
Average Ramp-Up Rate (Ts max. to Tp)	3° C/second max.
Preheat -Temperature Min (Ts min.) -Temperature Max (Ts max.) -Time (ts min. to ts max.)	150 °C 200 °C 60-120 seconds
Time maintained above: -Temperature (TL) -Time (tL)	217 °C 60-150 seconds
Peak/Classification Temperature (Tp)	250°C
Time within 5 °C of actual Peak Temperature (tp)	10seconds max.
Ramp-Down Rate	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

Test Solderability Temperature Profile



Material Certificate List

序号	包材类型	包材规格	用量	材料单位
1	下带	24PIN/*13.4M/R-834PCS	13.4	M/卷
2	卷轮	24"*13.5*33"蓝色	1	套
3	透明防护带	24"透明皮料	1.5M	条
4	上带	自沾 21.3*200M/R	13.4	M/卷
5	真空袋	420*460*0.1mm 真空袋	1	个
6	干燥剂	54*45	1	袋
备注事项	1. PIN1 朝有孔(一边有孔). 2. 打带前留 9 个空格, 打带后留 25 个空格. 3. 打带完毕后, 用防护带再包 1 圈. 4. 打带完毕后, 卷盘上贴上标签.			



Packing Specification

1.产品每内盒数量:	每卷数量	800	X	每单元数量	2	=	1600	PCS
2.产品每箱数量:	每单元数量	1600	X	每箱单元数	5	=	8000	PCS

<3>产品重量

单颗淨重:		g	单箱淨重:		kg	单箱毛重:	
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<4>备注事项

- 1.带盘装箱前,先用真空袋包起来.放入 1PCS 干燥
- 2.带盘装箱前,先用复合袋包起来.然后用抽真空抽气机把里面的空气抽出,再用抽真空机将复合袋口封好.
- 3.装好卷带后,需用封口胶(或纸胶带)在弧口处封住上下盖.
- 4.包装好产品在外箱方筐内上贴标标签。

Packing Illustration

