



东莞天富电子科技有限公司

产品承认书

CUSTOMER	CUSTOMER NO.	TF PART NO.
		TFS5009
DESCRIPTION:	10/100/1000 BASE-T TRANSFORMER MODULES	

ATTACHMENT:

■ SPECIFICATION

■ SAMPLE Q'TY OF SAMPLES 5 PCS

CUSTOMER APPROVAL (客户承认章)		KDY APPROVAL (公司承认章)	
SALES BY:		DRAWN BY:	Season
QA DEPT. :		CHECKED BY:	DellyDeng
ENG. DEPT.:		APPROVAL BY:	JamesYan



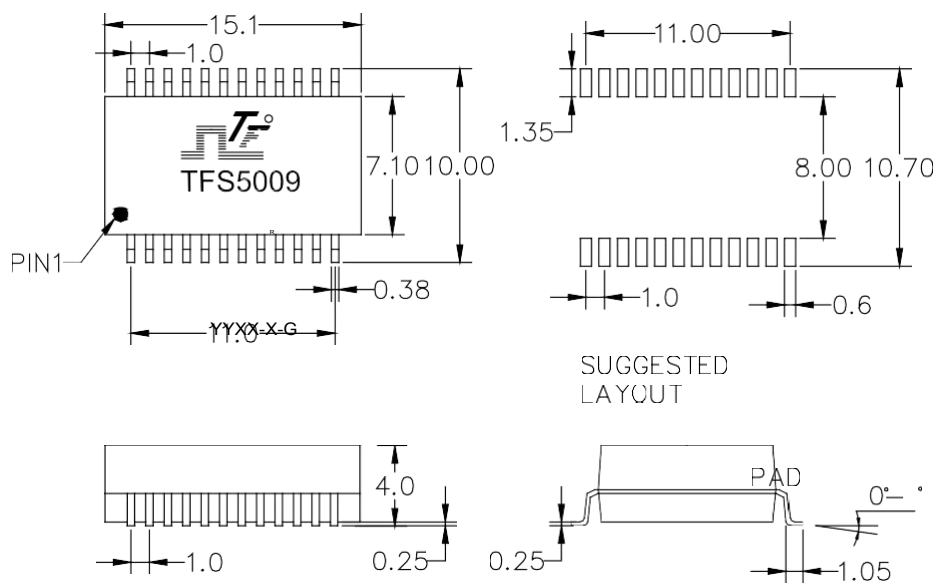
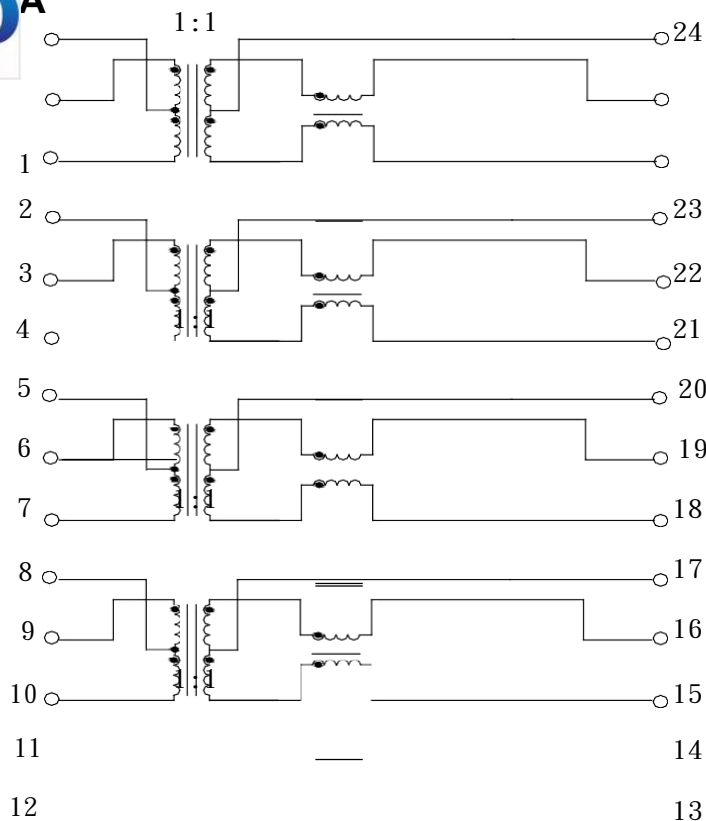
1. FEATURES:

- 1.1 Compatible with various 10/100/1000 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
- 1.3 Low profile Surface Mount Packaging designed for Hi-Temp Reflow Process (255°C peak)
- 1.4 Single channel interface for 10/100/1000Mbps Ethernet applications with CMC's tuned to Enhance EMC system performance
- 1.5 Operating Temperature range: 0°C to 70°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: 30 pF Max. @ 100KHz, 0.1V
- 2.4 DCR: 1.30Ω Max.
- 2.5 Turns Ratio(±5%): 1CT:1CT(TX), 1CT:1CT(RX)
- 2.6 Insertion Loss: -1.1 dB Max. @ 1-100MHz
- 2.7 Return Loss: -18 dB Min. @ 1-30MHz
-12 dB Min. @ 60-80MHz
- 2.8 Cross Talk: -42 dB Min. @ 1-30 MHz
-40 dB Min. @ 60 MHz
-38 dB Min. @ 80-100MHz
- 2.9 Common Mode Rejection : -42 dB Min. @ 1-30 MHz
-40 dB Min. @ 60 MHz
-35 dB Min. @ 80-100 MHz
- 2.10 Isolation HI-POT: 1500Vrms 1mA 1Second

DRAWN BY:	CHECKED BY:	APPROVED BY:	CUSTOMER:
Season	DellyDeng	JamesYan	PART NO. : TFS5009
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DRAWN BY:	CHECKED BY:	APPROVED BY:	CUSTOMER:
Season	DellyDeng	JamesYan	PART NO. : TFS5009
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样品测试报告(1)

■ Customerr(客户)				Part number(客户料号)		Model(机种):TFS5009		
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	591.4	598.2	592.1	588.9	0.11	0.11	0.12	0.11
2	591.8	589.0	589.9	589.3	0.11	0.11	0.12	0.11
3	594.5	588.4	588.4	588.3	0.12	0.12	0.11	0.12
4	590.3	589.3	589.5	589.0	0.12	0.11	0.11	0.11
5	592.4	590.3	589.4	588.6	0.12	0.12	0.12	0.11
6	591.4	591.2	589.4	588.1	0.11	0.12	0.12	0.11
7	597.9	592.3	587.5	593.2	0.11	0.11	0.12	0.12
8	594.5	590.4	589.5	589.5	0.12	0.12	0.12	0.11
9	591.5	592.3	591.3	589.4	0.12	0.12	0.11	0.11
分項判定	pass	Pass	pass	pass	pass	pass	pass	pass
DRAWN BY:		CHECKED BY:		APPROVED BY:		CUSTOMER:		
Season		DellyDeng		JamesYan		PARTNO. : TFS5009		
DONGGUAN TIANFU ELECTRONICS CO.,LTD						REV.: A		
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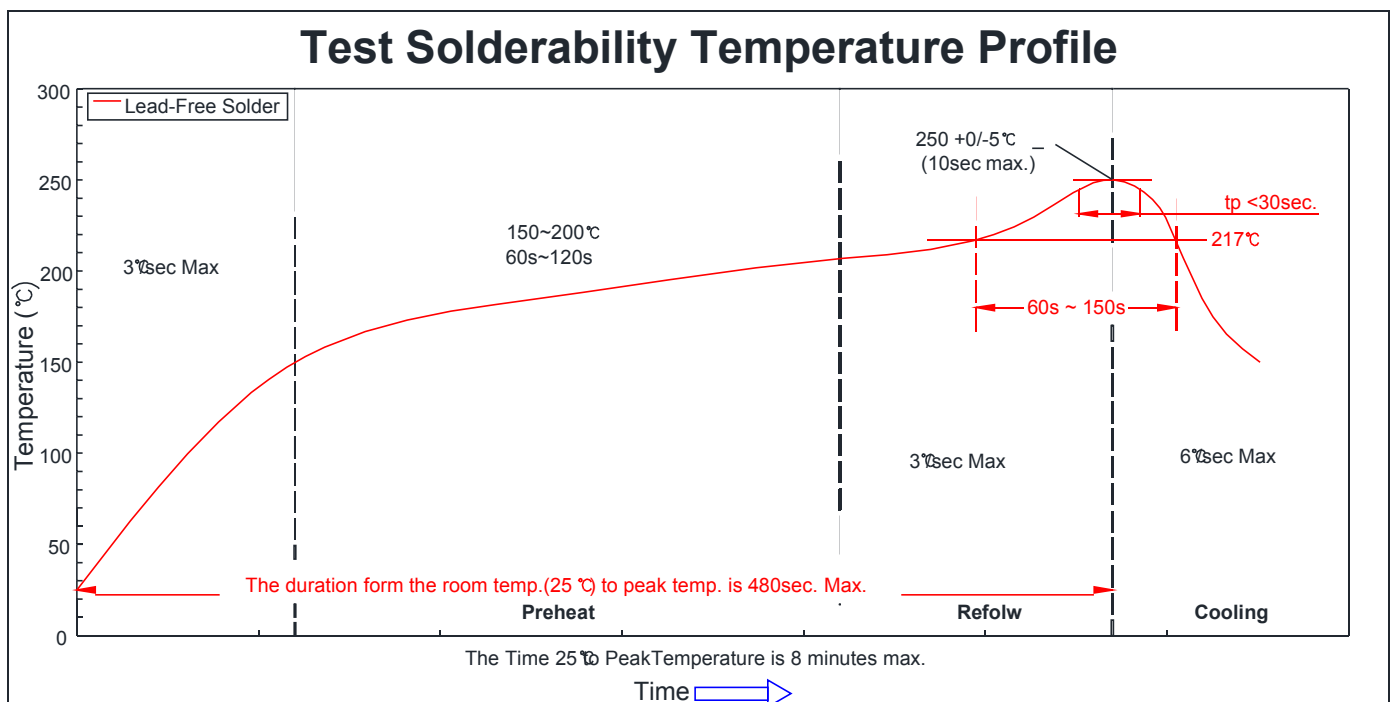


样品测试报告(2)

■ Customerr(客户)				Part number(客户料号)		Model(机种):TFS5009		
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	30pF				1.0Ω			
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	23.1	22.1	22.3	21.3	0.73	0.71	0.72	0.72
2	23.1	21.3	22.3	21.1	0.72	0.72	0.71	0.72
3	22.1	21.5	22.4	23.2	0.72	0.71	0.72	0.71
4	22.4	22.3	22.7	22.9	0.71	0.72	0.72	0.71
5	22.5	22.3	22.1	22.4	0.27	0.71	0.72	0.71
6	21.3	22.4	23.4	22.9	0.72	0.71	0.72	0.71
7	22.3	21.9	23.1	22.1	0.72	0.71	0.72	0.72
8	22.1	21.8	22.1	22.4	0.71	0.71	0.72	0.72
9	22.1	22.1	22.7	21.9	0.71	0.72	0.72	0.71
分項判定	pass	pass	pass	pass	Pass	pass	pass	pass
DRAWN BY:		CHECKED BY:		APPROVED BY:		CUSTOMER:		
Season		DellyDeng		JamesYan		PARTNO.: TFS5009		
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Advice Soldering Profile

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.



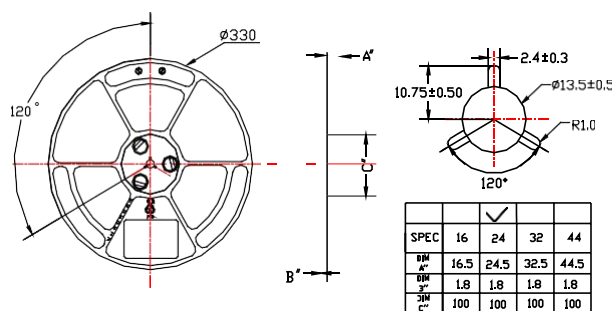
Packing Specification

<1> Part Number	TFS5009	<2> Customer	
<3> Product Size		<4> Version	1.0
<5> Package Item:	1. Each Reel Qty 800 X 10 (Total Reel in Carton) = 8000 PCS 2. Total unit transformer in carton 8000 X 1 (Carton Qty) = 8000 PCS		
<6> Product weight			
unit	0.64 g	N.W.	5.13 kg
		G.W.	6.2 Kg

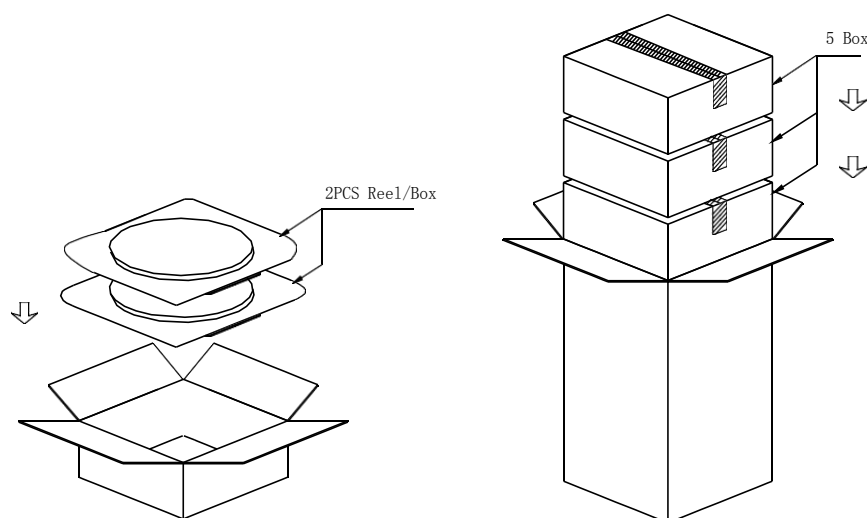
<7> Remark:

- PIN1 faces the apertures if apertures are only on one side. PIN1 faces the round aperture if the apertures are on both sides.
- Leave 160mm-taping before starting taping; leave 390mm-taping after taping.
- Wrap the protected-tape around the reel after taping.
- Pack the reel with bag and seal it before putting into the carton.
- Hard cardboard will be placed in each corner of the carton for protection.
- Cartons will be sealed with tape.

<9> Reel Dimension



<10> Packing Illustration



MSL-2

