



东莞天富电子科技有限公司

# 产品承认书

<b>CUSTOMER</b>	<b>CUSTOMER NO.</b>	<b>TF PART NO.</b>
		<b>TF5040</b>
<b>DESCRIPTION:</b>	<b>10/100/1000 BASE-T TRANSFORMER MODULES</b>	

**ATTACHMENT:**

■ SPECIFICATION

■ SAMPLE Q'TY OF SAMPLES 5 PCS

<b>CUSTOMER APPROVAL</b> (客户承认章)	<b>KDY APPROVAL</b> (公司承认章)

<b>SALES BY:</b>		<b>DRAWN BY:</b>	<b>Season</b>
<b>QA DEPT. :</b>		<b>CHECKED BY:</b>	<b>DellyDeng</b>
<b>ENG. DEPT.:</b>		<b>APPROVAL BY:</b>	<b>JamesYan</b>



## 1. FEATURES:

- 1.1 Compatible with various 10/100/1000 Base-TX for POE transceiver requiring 1:1 transmit and receive turns ratio
- 1.2 Compliant with IEEE 802.3 standard including baseline wander for 720mA
- 1.3 Low profile Surface Mount Packaging designed for Hi-Temp Reflow Process (260°C peak)
- 1.4 Single channel interface for 1000Mbps Ethernet applications with CMC's tuned to Enhance EMC system performance
- 1.5 Operating Temperature range:0°C to 70°C

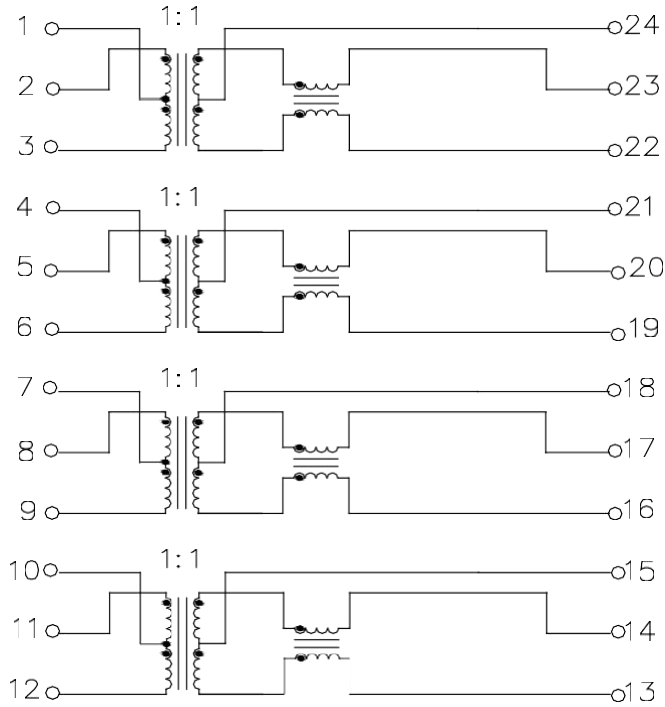
## 2.ELECTRICAL SPECIFICATIONS @25°C

- 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: 30pF Max. @ 100KHz, 0.1V
- 2.4 DCR: 1.0Ω 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: -16 dB Min. @ 1-30MHz
  - 12 dB Min. @ 60 MHz
  - 10 dB Min.@ 80 MHz
- 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

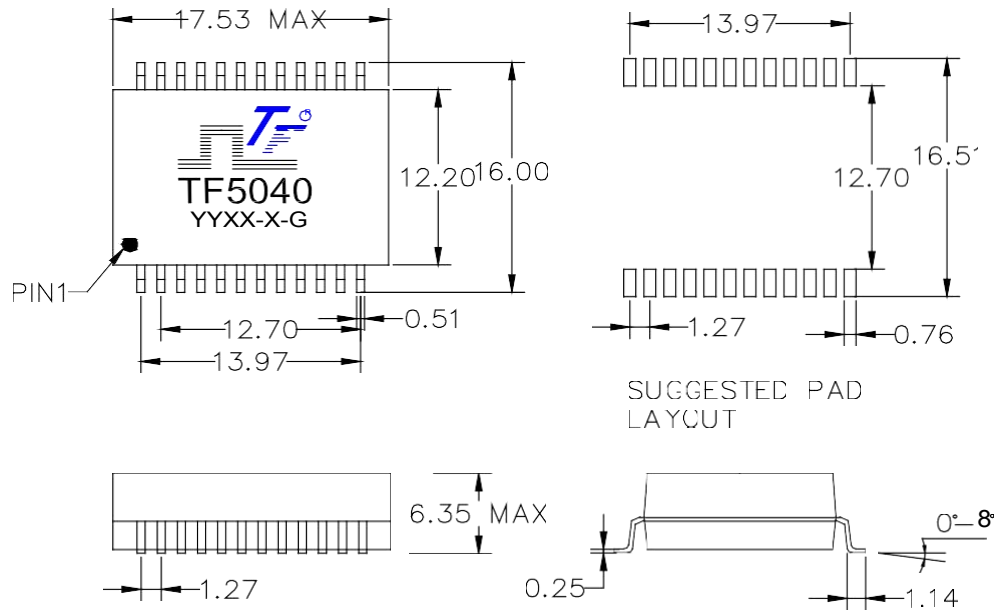
DRAWN BY:	CHECKED BY:	APPROVED BY:	CUSTOMER:
<b>Season</b>	<b>DellyDeng</b>	<b>JamesYan</b>	PART NO. : <b>TF5040</b>
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### 3. SCHEMATICS:

Schematic:



Dimensions:



Dimensions in mm

Unless otherwise specified, all tolerances are ±0.25

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Season	DellyDeng	JamesYan	PART NO. : TF5040
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# 样品测试报告(1)

■ Customer(客户)				Part number(客户料号)				Model(机种):			
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		591.30	589.40	590.50	587.40	0.11	0.13	0.12	0.11		
2		591.90	588.00	592.40	588.90	0.12	0.13	0.12	0.12		
3		592.30	589.10	592.80	589.50	0.13	0.12	0.11	0.12		
4		589.40	583.40	592.50	592.50	0.12	0.12	0.11	0.12		
5		590.20	593.40	587.40	594.10	0.11	0.13	0.12	0.12		
6		588.50	593.90	589.30	594.90	0.12	0.13	0.12	0.12		
7		598.20	588.90	592.40	593.20	0.12	0.12	0.11	0.12		
8		590.10	587.40	595.30	591.30	0.11	0.12	0.13	0.11		
9		592.30	595.30	592.10	596.30	0.13	0.13	0.14	0.13		
分項判定		pass	pass	pass	pass	pass	pass	pass	pass		
DRAWN BY:		CHECKED BY:			APPROVED BY:			CUSTOMER:			
Season		DellyDeng			JamesYan			PARTNO. : TF5040			
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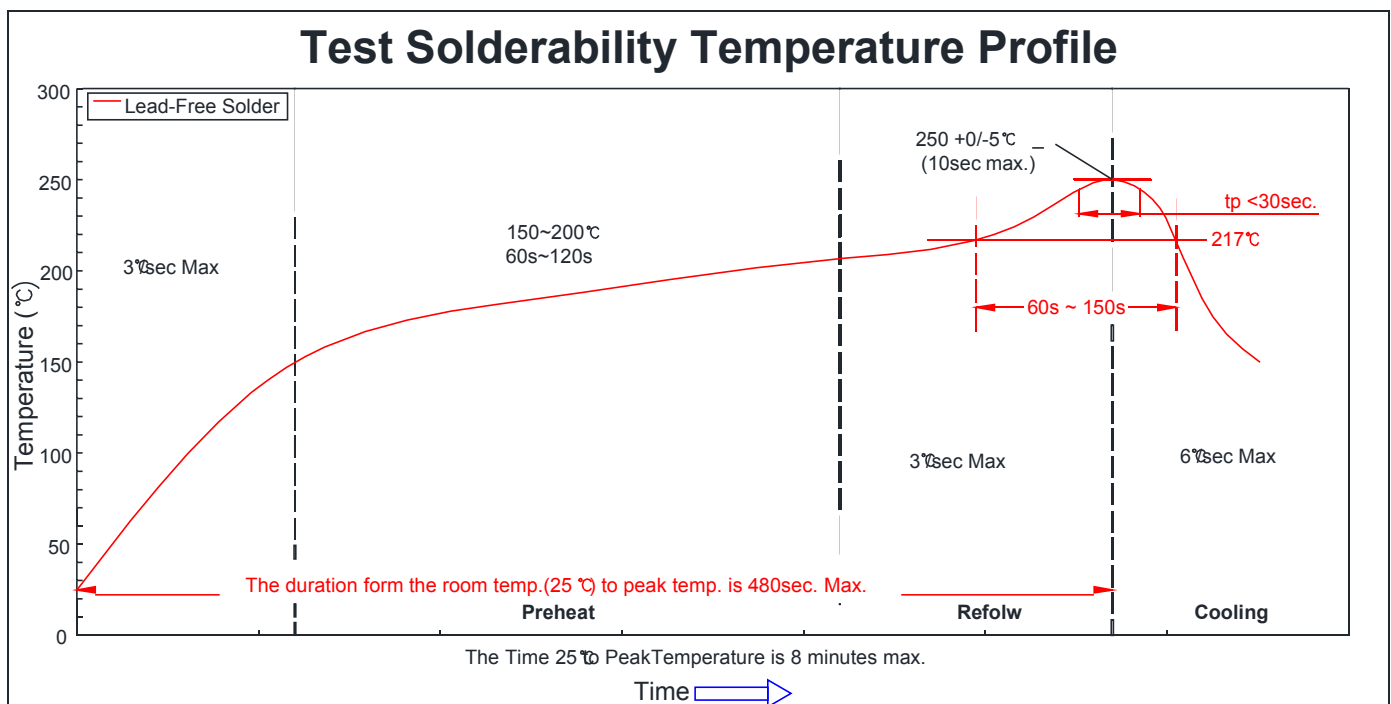


# 样品测试报告(2)

■ Customer(客户)				Part number(客户料号)				Model(机种):			
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	22.5	21.6	23.4	22.4	0.72	0.72	0.73	0.72			
2	23.4	22.3	22.8	23.4	0.74	0.72	0.72	0.74			
3	24.5	23.1	22.1	21.9	0.74	0.75	0.73	0.73			
4	22.3	22.4	22.9	23.8	0.73	0.73	0.74	0.76			
5	22.3	24.2	23.8	23.9	0.73	0.73	0.75	0.74			
6	22.9	24.2	21.9	22.3	0.73	0.73	0.74	0.73			
7	21.9	22.1	22.4	22.8	0.73	0.73	0.73	0.74			
8	22.5	22.6	22.7	23.8	0.73	0.72	0.73	0.73			
9	21.7	23.1	23.4	22.4	0.72	0.72	0.73	0.72			
分項判定	pass	pass	pass	pass	pass	pass	pass	pass			
DRAWN BY:		CHECKED BY:		APPROVED BY:			CUSTOMER:				
Season		DellyDeng		JamesYan			PARTNO. : TF5040				
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## Advice Soldering Profile

Profile Feature	
Average Ramp-Up Rate (Ts max. to Tp)	3° C/second max.
<b>Preheat</b> -Temperature Min (Ts min.) -Temperature Max (Ts max.) -Time (ts min. to ts max.)	150 °C 200 °C 60-120 seconds
<b>Time maintained above:</b> -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.



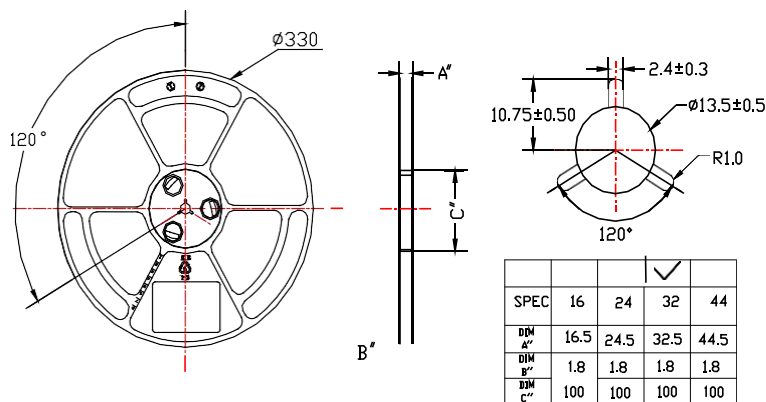
# Packing Specification

<1> Part Number	TF5040		<2> Customer			
<3> Product Size			<4> Version	1.0		
<5> Package Item:	1. Each Reel Qty	400	X	10 (Total Reel in Carton)	=	4000 PCS
	2. Total unit transformer in carton	4000	X	1 (Carton Qty)	=	4000 PCS
<6> Product weight						
unit	1.65	g	N.W.	1	kg	G.W.
						7 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

