



东莞天富电子科技有限公司

产品承认书

CUSTOMER	CUSTOMER NO.	TF PART NO.	
		TF5433	
DESCRIPTION:	10/100/1000/5G BASE-T TRNSFORMER MODULES FOR POE + (1100mA)		
ATTACHMENT: ■ SPECIFICATION ■ SAMPLE Q'TY OF SAMPLES <u>5</u> 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. FEA

TURES:

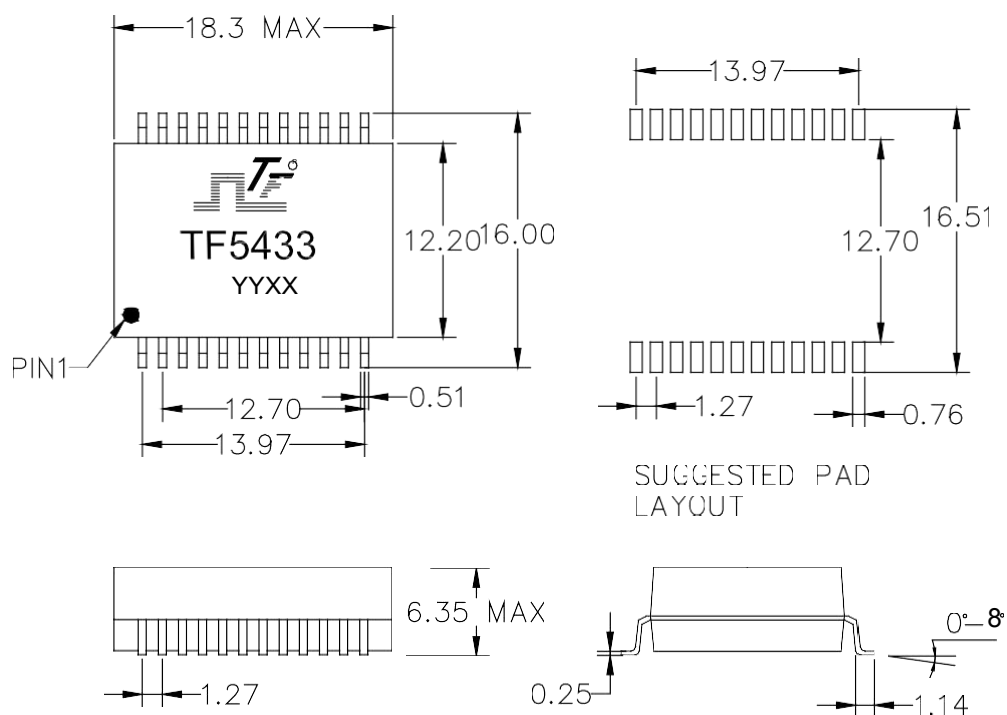
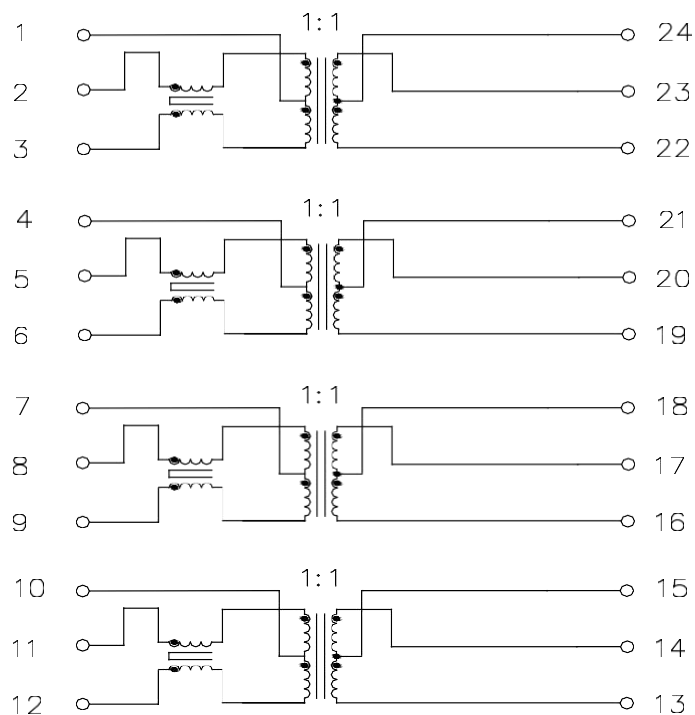
- 1.1 Compatible with various 10/100/1000/5G Base-TX for POE+ transceiver requiring 1:1 transmit and receive turns ratio
- 1.2 Compliant with IEEE 802.3 at standard including baseline wander compensation specification of 300uH OCL when Biased at 8mA from 25°C
- 1.3 Low profile Surface Mount Packaging 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 : 180 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
- 2.8Cross 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. : TF5433
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3. SCHEMATICS:



DRAWN BY:	CHECKED BY:	APPROVED BY:	CUSTOMER:
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样品测试报告(1)

■ Customerr(客户)				Part number(客户料号)		Model(机种):TF5433		
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	180 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	521.30	529.40	520.50	527.40	0.10	0.11	0.10	0.09
2	521.90	528.00	522.40	528.90	0.09	0.11	0.11	0.10
3	522.30	529.10	522.80	529.50	0.09	0.10	0.10	0.09
4	529.40	523.40	522.50	522.50	0.11	0.10	0.09	0.09
5	520.20	523.40	527.40	524.10	0.09	0.09	0.09	0.10
6	528.50	523.90	529.30	524.90	0.10	0.10	0.10	0.10
7	528.20	528.90	5922.40	523.20	0.09	0.11	0.10	0.10
8	520.10	527.40	525.30	5921.30	0.10	0.09	0.11	0.10
9	522.30	525.30	592.10	596.30	0.09	0.10	0.09	0.10
分項判定	pass	pass	pass	pass	pass	pass	pass	pass
DRAWN BY:		CHECKED BY:		APPROVED BY:		CUSTOMER:		
Season		DellyDeng		JamesYan		PARTNO. : TF5433		
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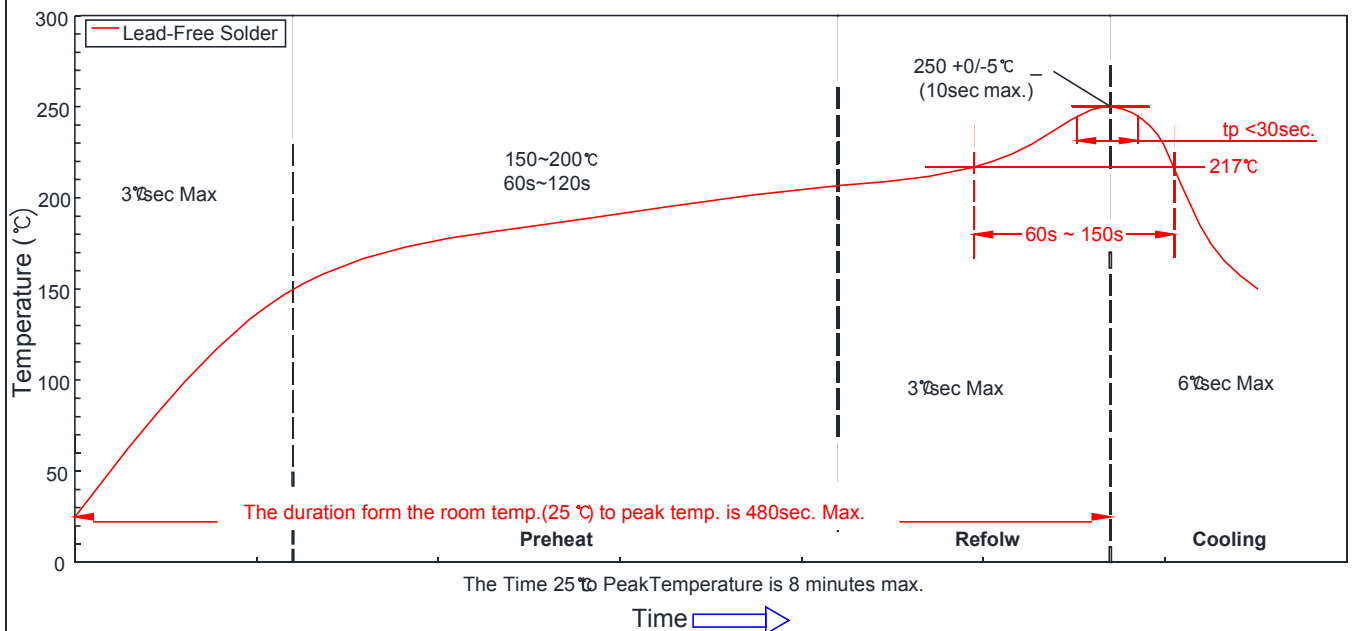
样品测试报告(2)

■ Customerr(客户)				Part number(客户料号)		Model(機種):TF5433		
测试项目	CW/W				DCR			
测试条件	100 KHz, 0.1V @ 8mA DC Bias				@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	19.8	18.9	19.4	19.4	0.55	0.54	0.55	0.54
2	19.9	19.9	19.3	19.4	0.55	0.55	0.55	0.54
3	20.1	19.8	19.5	19.8	0.54	0.55	0.55	0.55
4	19.8	19.9	19.5	19.5	0.55	0.54	0.55	0.55
5	19.9	19.5	19.8	19.8	0.54	0.54	0.54	0.54
6	19.9	19.6	19.4	19.5	0.55	0.55	0.54	0.55
7	19.8	19.8	19.7	19.5	0.56	0.54	0.55	0.54
8	20.1	19.9	19.6	19.9	0.55	0.54	0.55	0.55
9	20.1	19.8	19.8	19.8	0.55	0.54	0.55	0.54
分項判定	pass	pass	pass	pass	pass	pass	pass	pass
DRAWN BY:		CHECKED BY:		APPROVED BY:		CUSTOMER:		
Season		DellyDeng		JamesYan		PARTNO. : TF5433		
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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.

Test Solderability Temperature Profile



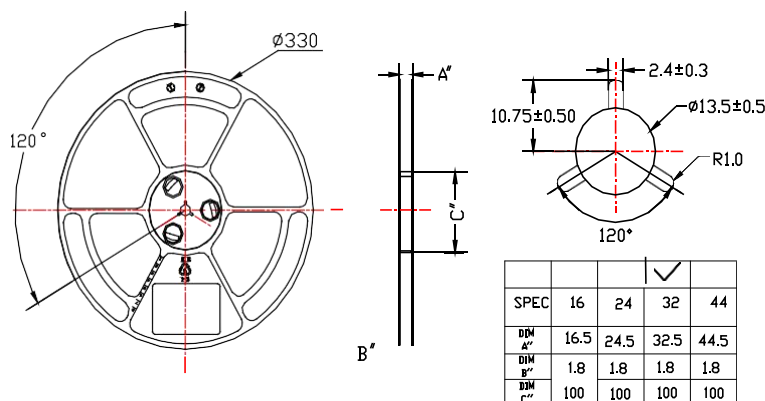
Packing Specification

<1> Part Number	TF5433		<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. 7.6 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

