



东莞天富电子科技有限公司

产品承认书

CUSTOMER	CUSTOMER NO.	TF PART NO.
	H1164	TF1164
DESCRIPTION:	10/100 BASE-T TRNSFORMER MODULES	

ATTACHMENT:

■ SPECIFICATION

■ SAMPLE Q'TY OF SAMPLES 20 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. FEATU RES:

- 1.1 Compatible with various 10/100 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 0°C to 70°C

(POE FOR350mA)

- 1.3 Low profile Surface Mount Packaging designed for Hi-Temp Reflow Process (260°C peak)
- 1.4 Single channel interface for 10/100Mbps Ethernet applications with CMC's tuned to Enhance EMC system performance
- 1.5 Operating Temperature range:0°C to 70°C

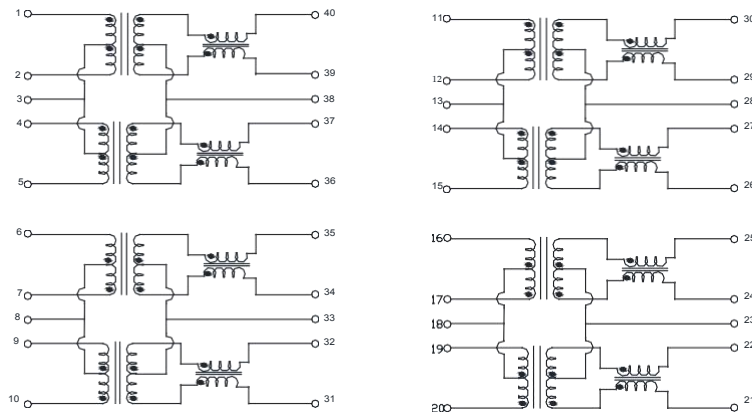
2.ELECTRICAL SPECIFICATIONS @25°C

- 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: 60 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: -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

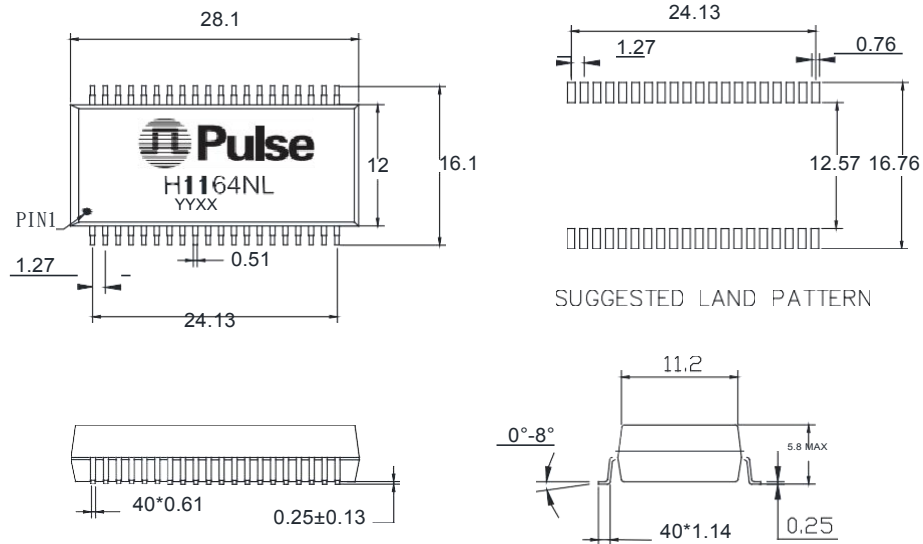
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3. SCHEMATICS:

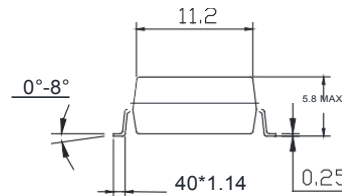
Schematic:



Dimensions:



SUGGESTED LAND PATTERN



Dimensions:mm

Unless otherwise specified, all tolerances are±0.25

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SAMPLE TEST DATA (样品测试报告)

NO	1	2	3	4	5	6	7	8	9	10
SPEC										
Turns Ratio:										
PRI:SEC=1CT:1CT $\pm 3\%$	OK	OK	OK	OK	OK					
HI-POT:										
PRI:SEC at 1500Vrms1mA	OK	OK	OK	OK	OK					
OCL(AT 100KHz, 100mV										
350uHMin.With8mA DC Bias)										
1-2	446	393	491	509	505					
4-5	454	439	495	406	481					
6-7	446	393	491	509	505					
9-10	454	439	495	406	481					
11-12	446	393	491	509	505					
14-15	454	439	495	406	481					
16-17	446	393	491	509	505					
19-20	454	439	495	406	481					
LK:(AT 100KHz, 0.1V)										
0.5 uH Max.										
1-2(40-39short)	0.19	0.15	0.20	0.24	0.22					
4-5(37-36 short)	0.20	0.22	0.24	0.23	0.20					
1-2(40-39short)	0.19	0.15	0.20	0.24	0.22					
4-5(37-36 short)	0.20	0.22	0.24	0.23	0.20					
1-2(40-39short)	0.19	0.15	0.20	0.24	0.22					
4-5(37-36 short)	0.20	0.22	0.24	0.23	0.20					
1-2(40-39short)	0.19	0.15	0.20	0.24	0.22					
4-5(37-36 short)	0.20	0.22	0.24	0.23	0.20					
Cw/w:(AT 100KHz, 0.1V)										
60 pF Max.										
3-38	45	43	40	39	41					
8-33	42	46	44	44	46					
13-29	38	41	43	42	44					
18-23	36	37	38	40	41					
MAIN TEST EQUIPMENT										
☒ TOPWARD TPT-500 WITHSTANDING VOLTAGE TESTER ☐ HEWLETT PACKARD 4277A LCZ METER ☒ CHEN HWA 3250 AUTOMATIC TRANSFORMER TEST SYSTEM ☒ CHEN HWA 502A LOW-OHMMETER ☐ RF NETWORK ANALYZERS HP8712ET										
REPORT BY:	CHECKED BY:	APPROVED BY:	CUSTOMER:							
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