



飛芯國際股份有限公司

# 產品承認書

CUSTOMER	CUSTOMER NO.	Fly_Core PART NO.
	HS821T	HS821T
DESCRIPTION:	10/100 BASE-T TRANSFORMER MODULES	

ATTACHMENT:

■ SPECIFICATION

■ SAMPLE            Q'TY OF SAMPLES    \_\_\_\_\_    PCS

CUSTOMER APPROVAL (客户承认章)		Fly_Core APPROVAL (公司承认章)	
SALES BY:		DRAWN BY:	Jack_Chen
QA DEPT. :		CHECKED BY:	SilceDeng
ENG. DEPT.:		APPROVAL BY:	JamesTan

成都浩然电子有限公司

电话 : 028-86127089    0755-86066647

技术 : [support@hschip.com](mailto:support@hschip.com)

网址 : <http://www.hschip.com>



微信公众号




手机淘宝商城

## 1. FEATURES:

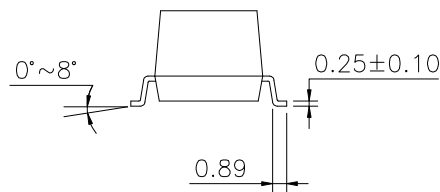
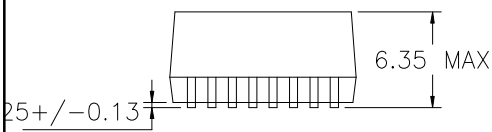
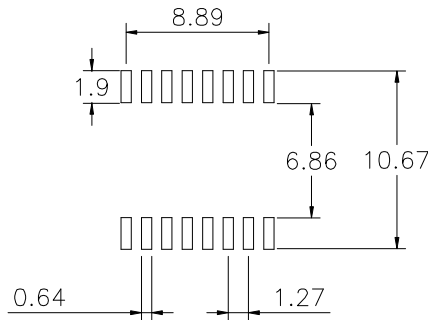
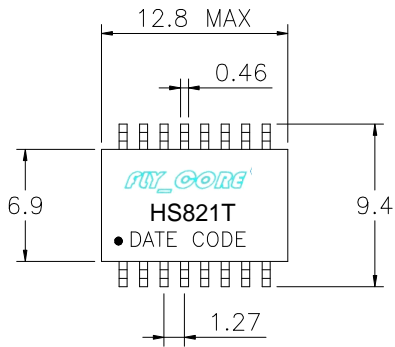
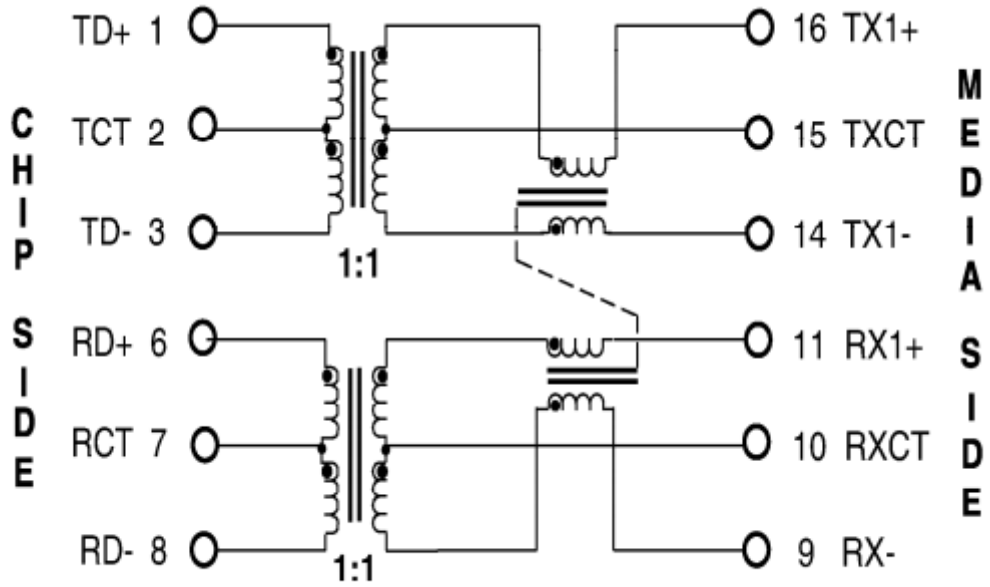
- 1.1 Compatible with various 10/100 Base-TX transceiver requiring 1:1 transmit and receive turns ratio
- 1.2 Compliant with IEEE 802.3 standard including baseline wander  
Suitable for End-span and Mid-span POE applications  
compensation specification of 350uH OCL when Biased at 8mA from -40°C to 85°C
- 1.3 Low profile Surface Mount Packaging designed for Hi-Temp Reflow Process  
(255°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:-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: 30pF 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
- 2.8 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:
Jack_Chen	SilceDeng	JamesTan	PART NO. : HS821T
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			PAGE: 1 OF 3

### 3. SCHEMATICS:



Units: mm

Unless otherwise specified all tolerances are  $\pm 0.25$ .

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PAGE: 2 OF 3

Fly\_Core-QTC-001

# SAMPLE TEST DATA (样品测试报告)

NO	1	2	3	4	5	6	7	8	9	10
SPEC										
URNS RATIO:										
PRI:SEC=1CT:1CT ±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)										
1-3	446	393	491	509	505					
6-8	454	439	495	406	481					
LK:(AT 100KHz, 0.1V)										
0.5 uH Max.										
1-3(16-14short)	0.19	0.15	0.20	0.24	0.22					
6-8(11-9short)	0.20	0.22	0.24	0.23	0.20					
Cw/w:(AT 100KHz, 0.1V)										
30 pF Max.										
2-15	15	23	20	19	21					
7-10	22	16	24	22	20					

**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-OHM METER
- RF NETWORK ANALYZERS HP8712ET

REPORT BY:	CHECKED BY:	APPROVED BY:	CUSTOMER:
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PAGE: 3 OF 3