

产品承认书

SPECIFICATION FOR APPROVAL

CUSTOMER:	
CUSTOMER P/N:	
CND-TEK P/N. :	G4812S
DESCRIPTION:	1000 BASE-T POE+MAGNETICS MODULES
REF NO:	QTC-001
REV/NO:	V1.02
DATE:	2015/03/02

ATTACHMENT:
■ SPECIFICATION
■ SAMPLE Q'TY OF SAMPLES PCS

	√	CUSTOMER'S SIGNATURE	REMARK
FULL APPROVED			
CONDITIONAL APPROVED			
REJECTED			

CND-TEK

G4812S

1000 BASE-T MAGNETICS MODULES



V1.0.2
Feb 2, 2015

CND-TEK

深圳磁联达电子有限公司

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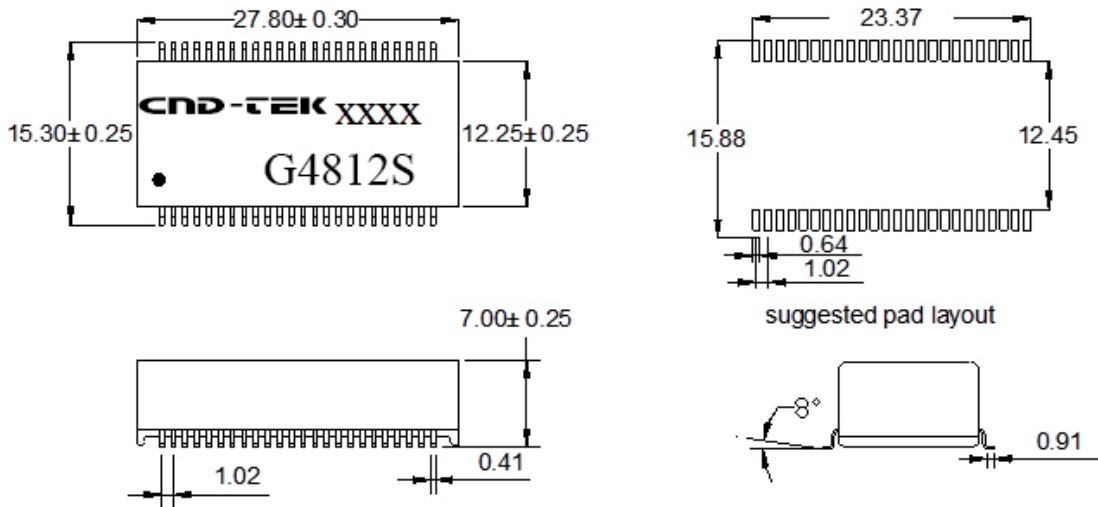
Email: sales2@cd-tek.com

Http: //www.cd-tek.com

1. FEATURES:

- 1.1 Designed for long haul Gigabit Ethernet 100/1000 Base-T, full duplex applications.
- 1.2 Supports four pairs of category 5 UTP cable,Cable interface for isolation and low common mode emissions.
- 1.3 Cable interface for isolation and low common mode emissions
- 1.4 Compliant with IEEE 802.3af standard for 1000 Base-T,Designed to support 1:1 Turns Ratio Transceivers.
- 1.5 Suitable For End-span and Mid-span POE+ Applications 720mA Current Capadility Per POE Port
- 1.6 Operating Temperature range: -0°C TO +70°C
- 1.7 Storage temperature range: -25°C TO +125°C

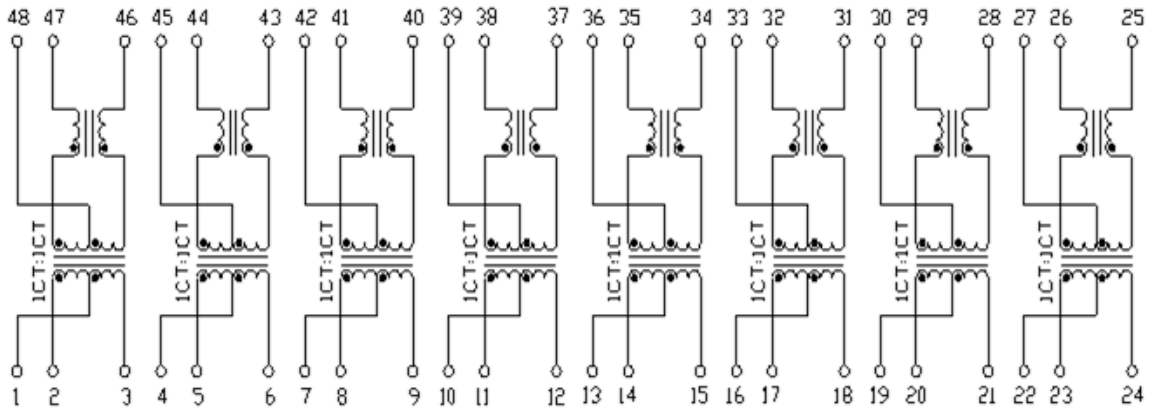
2. DIMENSIONS & MARKING



Note: 1、 Dimension: mm

2、 Unless otherwise specified,all tolerances are: ± 0.05 mm

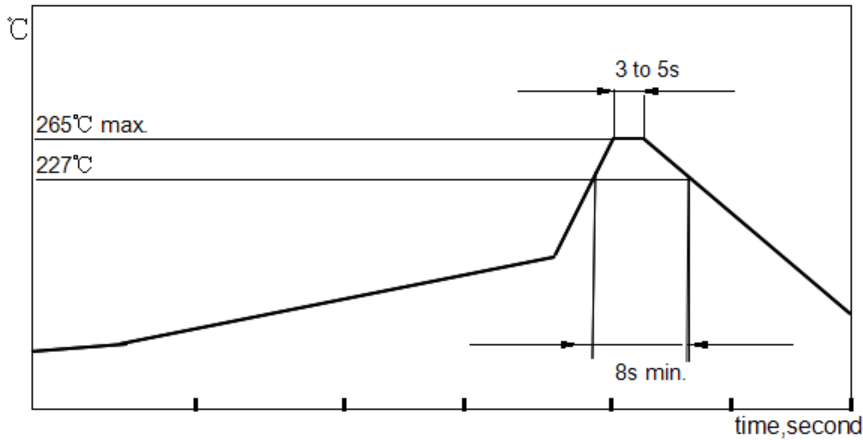
3. SCHEMATICS:



4. ELECTRICAL SPECIFICATIONS @25°C

- 4.1 OCL : 350 μ H Min. @ 100 KHz, 100mV with 24mA DC Bias
- 4.2 Leakage Inductance: 0.5 μ H Max. @ 100KHz, 0.2V
- 4.3 Cw/w: 28 pF Max. @ 100KHz, 0.2V
- 4.4 DCR: 1.20 Ω Max.
- 4.5 Turns Ratio(\pm 5%): 1CT:1(TX), 1CT:1(RX)
- 4.6 Polarity: 2-47, 5-44, 8-41, 11-38,14-35,17-32,20-29,23-26 In-Phase
- 4.7 Insertion Loss: -1.1 dB Max. (TX & RX)@ 1-100 MHz
- 4.8 Return Loss: -18 dB Min @ 0.5-30MHz
 - 15 dB Min @ 40 MHz
 - 13 dB Min @ 60 MHz
 - 11 dB Min @ 80 MHz
 - 10 dB Min.@ 100 MHz
- 4.9 Cross Talk: -45 dB Min.@ 30 MHz
 - 40 dB Min.@ 60 MHz
 - 35 dB Min.@ 100 MHz
- 4.10 Common Mode Rejection : -43 dB Min.@ 1-30 MHz
 - 37 dB Min.@ 60 MHz
 - 33 dB Min.@ 80-100 MHz
- 4.11 Isolation HI-POT: 1500Vrms 1mA 1Second

5. Recommended Lead Free IR Reflow Soldering Curve :



Item	Soldertechnique simulation	Temperature (°C)	Time(s)	Temperature ramp/immersion and emersion rate
1	Solder iron	350 ± 10 (solder irno temp)	4~5	
2	Vapor phase reflow	215 ± 5 (vapor temp)	60 ± 5	
3	IR/convection reflow	255 ± 5 (component temp)	30 ± 5	1°C/s~4°C/s time above 183°C 90s~120s

Note: The curve includes recommended value only, please adjust your equipment to make sure the solder process.Details please refers to the standard J-STD-020.

6. Reliability Test Criteria:

6.1 Terminal strength: Pull test withstand 9.8N 60+/-0.5S no looseness or movement.

6.2 Solderbility: Dipped in 245°C+/-5°C molten solder for 3+/-0.5 seconds,95% min shall be smooth any and bright.

6.3 Resistance to soldering heat : Convection reflow condition setting: peak temperature at 260°C+0/-5°C above 217°C for 90-180 seconds, ramp-up rate 2-3°C/s. Ramp-down rate 6°C/s Max. No mechanical problem found. No electrical failure found per our specification.

6.4 Vibration: 1.5mm amplitude total excursion 10-55-10 Hz traversed in 1minute, x.y.z, axis for 2 hours. Shall not be any abnormality.

6.5 Random drop (Packing condition): Height 60cm, 3 times on the wood floorboard ,shall not be any abnormality.

6.6 Dry heat: 100+/-2°C 96 hours.

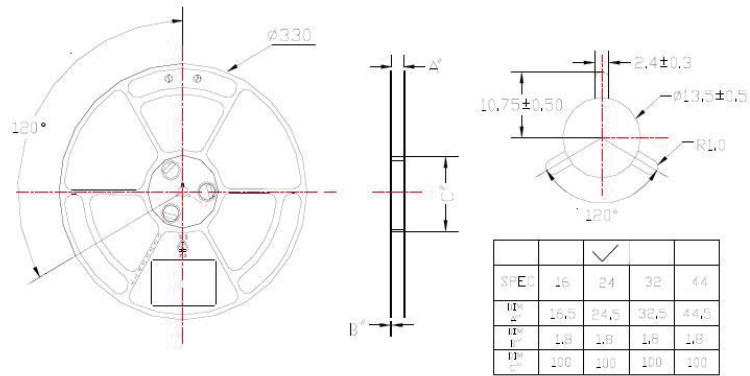
6.7 Cold: -20+/-2°C 96 hours.

6.8 Damp Heat: 60+/-2°C, 93+/-3% RH 96 hours.

6.9 Change of temperature: exposed 5 cycle; each consisting of 30 minutes at -20+/-2°C,2-3minutes at 20+/-2°C,30 minutes at 85+/-2°C, 2-3 minutes at 20+/-2°C.

Packing Specification

1、 Each Reel Qty : 350pcs/pkg



2、 Total unit transformer in carton:

$$350 \times 5(\text{Total Reel in Carton}) = 1750 \text{ PCS}$$

