

# 产品承认书

## SPECIFICATION FOR APPROVAL

CUSTOMER:	
CUSTOMER P/N:	
CND-TEK P/N. :	B4004S
DESCRIPTION:	10/100 BASE-T MAGNETICS MODULES
REF NO:	QTC-001
REV/NO:	V1.02
DATE:	2015/03/02

ATTACHMENT:
<input type="checkbox"/> SPECIFICATION
<input type="checkbox"/> SAMPLE    Q'TY OF SAMPLES    PCS

	√	CUSTOMER'S SIGNATURE	REMARK
FULL APPROVED			
CONDITIONAL APPROVED			
REJECTED			

# CND-TEK

## B4004S

### 10/100 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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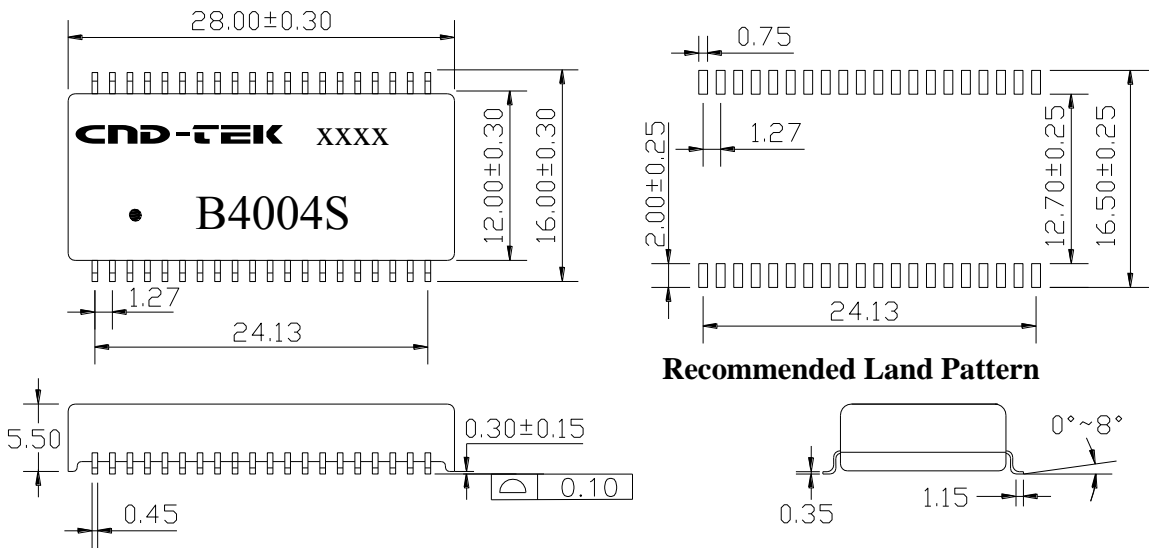
Email: sales2@cd-tek.com

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## 1. FEATURES:

- 1.1 Quad Port transformer Modules (10/100 Base-TX) for Auto MDI/MDIX applications.
- 1.2 Compliant with IEEE 802.3 standard including baseline wander compensation specification of 350μH OCL when Biased at 8mA from 0°C to 70°C
- 1.3 Low profile Surface Mount Packaging designed for Hi-Temp Reflow Process
- 1.4 Various Pinout options available for Optimal Printed Board(Single and Double Stacked RJ45) layout.
- 1.5 Operating Temperature range: -40°C TO +85°C
- 1.6 Storage temperature range: -25°C TO +125°C

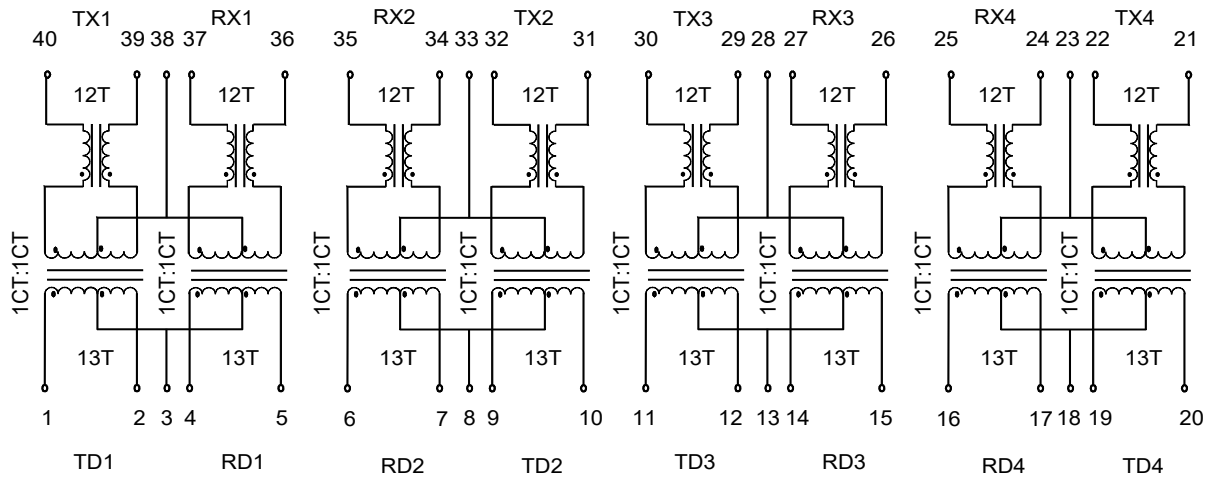
## 2. DIMENSIONS & MARKING



**Note:** 1、 Dimension: mm

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

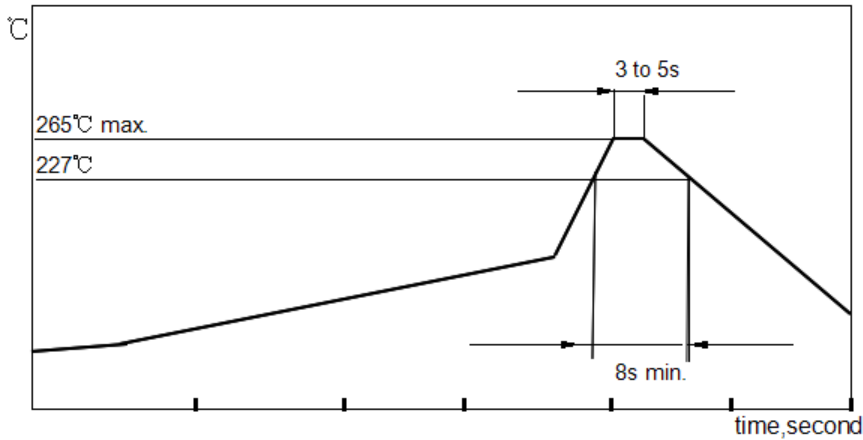
### 3. SCHEMATICS:



### 4. ELECTRICAL SPECIFICATIONS @25°C

- 4.1 OCL :** 350  $\mu$ H Min. @ 100 KHz, 100mV with 8mA DC Bias
- 4.2 Leakage Inductance:** 0.5  $\mu$ H Max. @ 100KHz, 0.2V
- 4.3 Cw/w:** 56 pF Max. @ 100KHz, 0.2V
- 4.4 DCR:** 1.20  $\Omega$  Max.
- 4.5 Turns Ratio( $\pm$ 5%):** 1CT:1CT(TX), 1CT:1CT(RX)
- 4.6 Polarity:** 1-40, 4-37, 6-35, 9-32, 11-30, 14-27, 16-25, 19-22 In-Phase
- 4.7 Insertion Loss:** -1.0 dB Max. @ 1-100MHz
- 4.8 Return Loss:** -16 dB Min. @ 1-30MHz  
 -12 dB Min. @ 30-60 MHz  
 -10 dB Min. @ 60-80 MHz
- 4.9 Cross Talk:** -42 dB Min. @ 1-60 MHz  
 -35 dB Min. @ 60-100 MHz
- 4.10 Common Mode Rejection :** -40 dB Min. @ 1-30 MHz  
 -35dB Min. @ 60 MHz  
 -30dB 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.

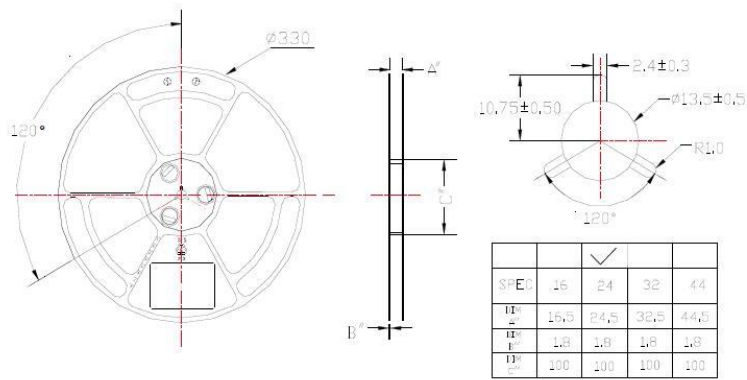
**6.7 Cold:** -20+/-2°C 96 hours.

**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.

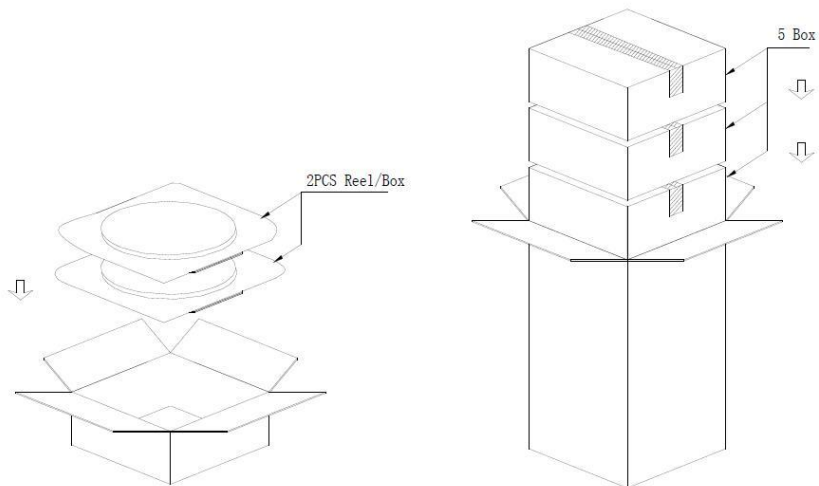
# Packing Specification

1、 Each Reel Qty : 400pcs/pkg



2、 Total unit transformer in carton:

$$400 \times 5 \text{ (Total Reel in Carton)} = 2000 \text{ PCS}$$



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