

产品承认书

SPECIFICATION FOR APPROVAL

CUSTOMER: _____

CUSTOMER P/N: _____

CND-TEK P/N. : _____ CB1688S

DESCRIPTION: _____ 100 BASE ETHERNET TRANSFORMER/CHOKE

REF NO: _____ QTC-001

REV/NO: _____ A/0

DATE: _____ 2023/03/02

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

| | √ | CUSTOMER'S SIGNATURE | REMARK |
|----------------------|---|----------------------|--------|
| FULL APPROVED | | | |
| CONDITIONAL APPROVED | | | |
| REJECTED | | | |

CND-TEK

CB1688S

100 BASE ETHERNET
TRANSFORMER/CHOKE



V1.0.2 Feb 2,2023

CND-TEK

深圳磁联达电子有限公司

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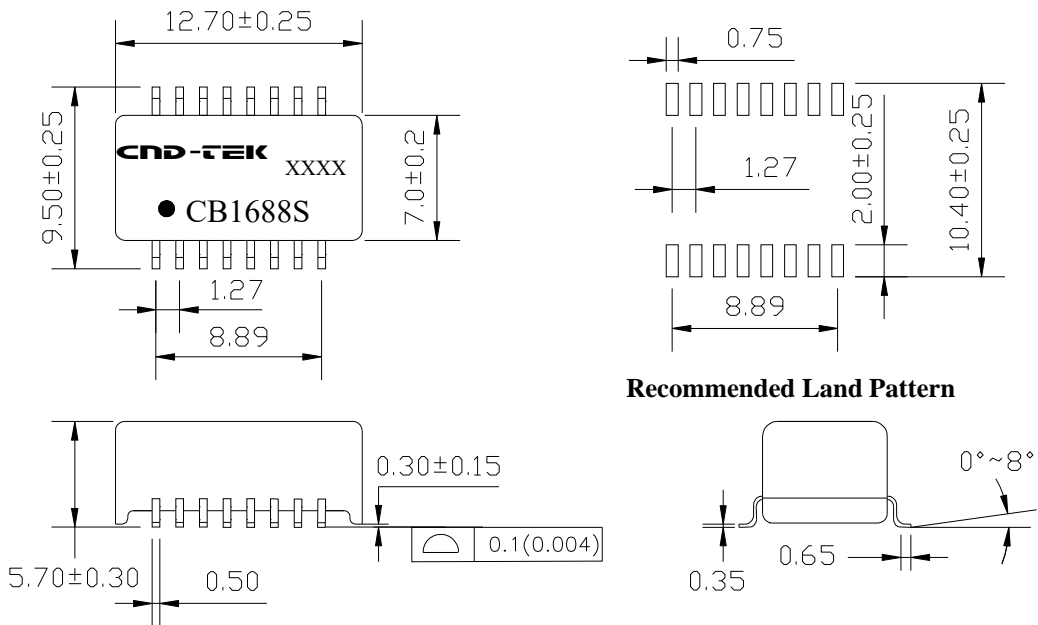
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Http: //www.cd-tek.com

1. FEATURES:

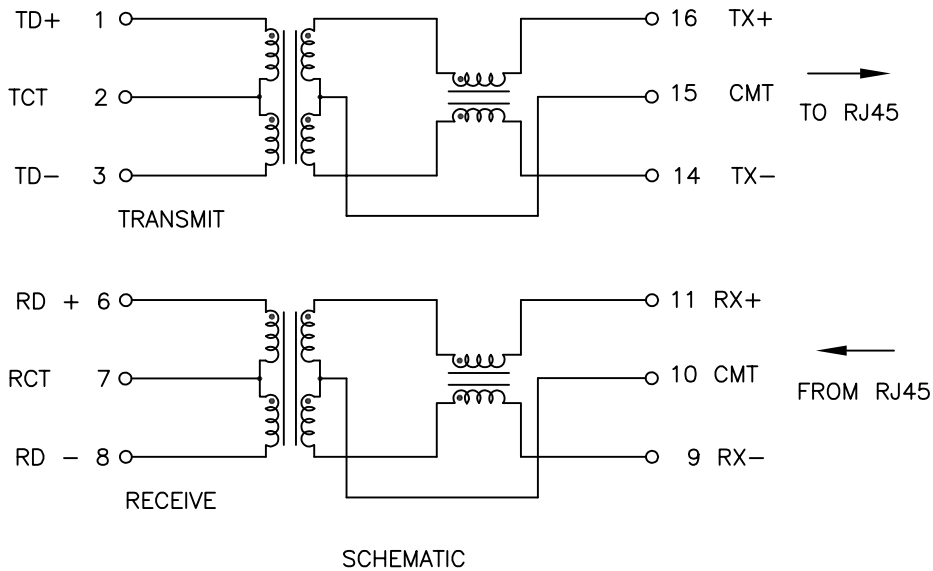
- 1.1 Compatible with various 10/100 Base-TX transceiver requiring 1:1 transmit and 1:1 receive turns ratio.
- 1.2 Compliant with IEEE 802.3 standard including baseline wander compensation specification of 350 μ H OCL when Biased at 8mA
- 1.3 Low profile Surface Mount Packaging designed for Hi-Temp Reflow Process
- 1.4 Single channel interface for 10/100Mbps Ethernet applications with CMC's tuned to Enhance EMC system performance
- 1.5 Operating temperature: -40 to +105 °
- 1.6 Storage temperature: -50 to +125 °
- 1.7 RoHS compliant

2. DIMENSIONS & MARKING



- Note:** 1、 Dimension : mm
2、 Unless otherwise specified, all tolerances are : ± 0.05 mm

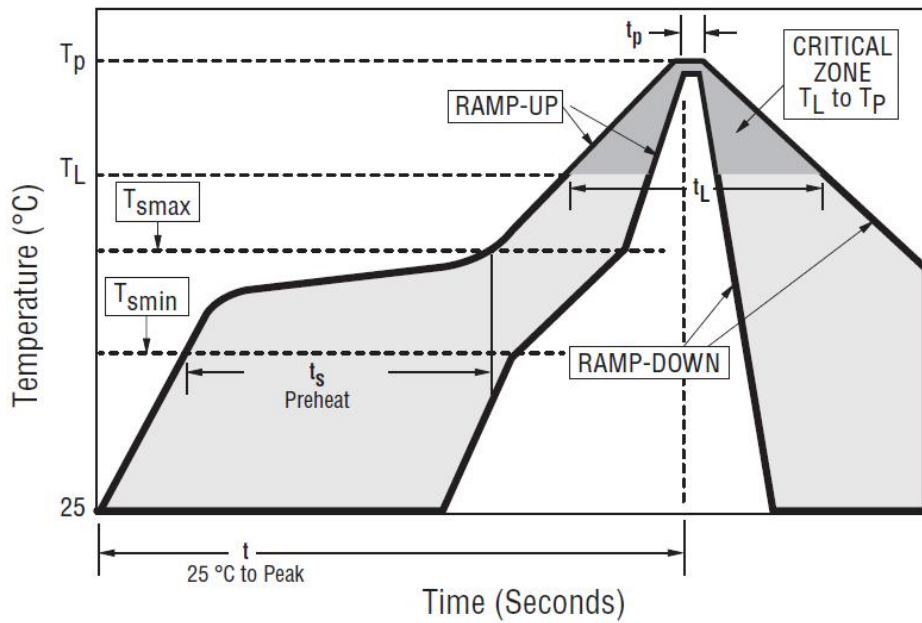
3. SCHEMATICS:



4. ELECTRICAL SPECIFICATIONS @25°C

- 4.1 OCL :** 350 μ H Min. @ 100 KHz, 100mV with 8mA DC Bias
- 4.2 Turns Ratio($\pm 5\%$):** 1CT:1CT(TX), 1CT:1CT(RX)
- 4.3 Polarity:** PER SCHEMATIC
- 4.4 Insertion Loss:** -1.0dB Max @ 1-100MHz
-3.0dB Max @125MHz
- 4.5 Return Loss:** -18dB Min. @ 5MHz
-16+26log₁₀(f/30 MHz) dB Min@ 30-80MHz
- 4.6 Cross Talk:** -62 dB Min.@ 1MHz
-45+21log₁₀ (f/30 MHz)dB Min@ 5-100MHz
- 4.7 Common Mode Rejection :** -50+17log₁₀ (f/5 MHz)dB Min
- 4.8 Isolation HI-POT:** 1500Vrms minimum for 60 Second

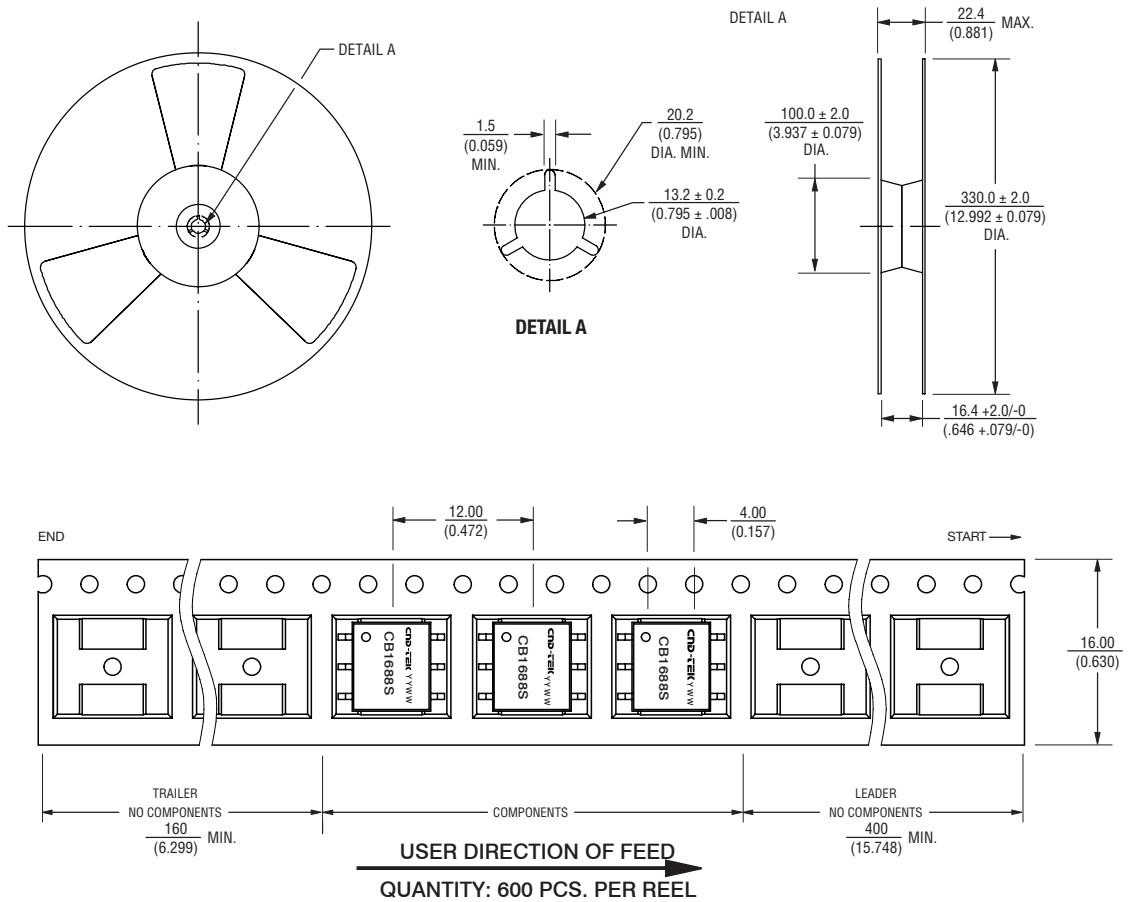
5. Recommended Lead Free IR Reflow Soldering Curve :



| | |
|---|------------------|
| 5.1 Profile Feature | Pb Free Assembly |
| 5.2 Average Ramp Rate (T_{smax} to T_P) | 3°C/second max. |
| 5.3 Preheat- Temperature Min. (T_{smin}) | 150°C |
| 5.4 Preheat- Temperature Max. (T_{smax}) | 200°C |
| 5.5 Preheat- Time (t_{smin} to t_{smax}) | 60seconds |
| 5.6 Time Maintained Above - Temperature (T_L) Time | 217°C |
| 5.7 Maintained Above - Time (t_L) | 60 seconds |
| 5.8 Peak Temperature (T_p) | 245°C MAX |
| 5.9 Time within 5 °C of Actual Peak Temperature (t_p) | 20-40 seconds |
| 5.10 Ramp-Down Rate | 6°C/second max. |
| 5.20 Time 25 °C to Peak Temperature | 8 minutes max. |

Packing Specification

Packaging Specifications



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$