

Specification for Approval

Customer:	
Customer P/N:	
EEC P/N:	ST12E01E0
Spec No.:	
Version No.:	V0.1
Description:	10 BASE-TX
	ESS Application

Customer Approval		EEC Approval	
Inspected By:		Issued By:	Bob
Checked By:		Checked By:	
Approved By:		Approved By:	
Approved Date:		Issued Date:	2024/7/13

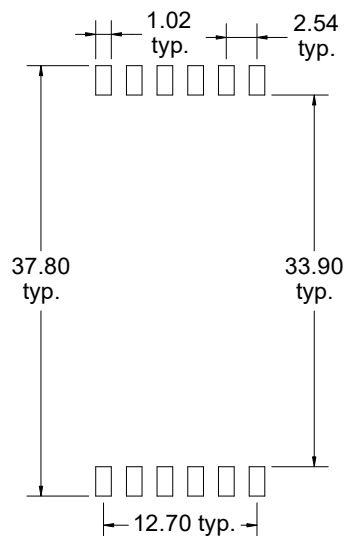
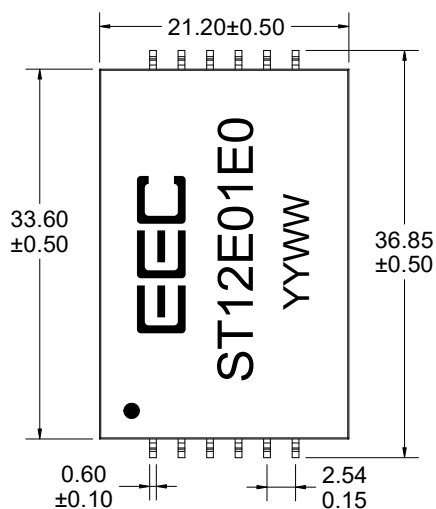
Please Return One Copy to Us After Approved,TKS! (承认后请回寄一份,谢谢)

- Remark:
- 1. Before use, please confirm whether this product is suitable for your design, Scientific only ensure products meet this specification.
 - 2. This specification data change must be confirmed by both parties,any individual modification is invalid.
 - 3. If customer placed orders without signing back this specification, it is regarded as recognition.

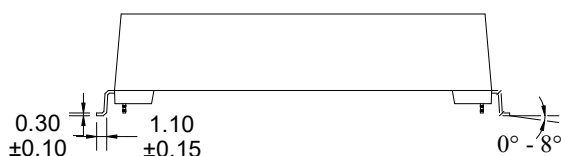


绵阳敦源电子科技有限公司
Mianyang Dunyuan Electronics Technology Co.,Ltd
地址： 四川省绵阳市高新区综合保税区
ADD: Comprehensive Bonded Zone, High-Tech Industrial Development Zone Mianyang, SiChuan

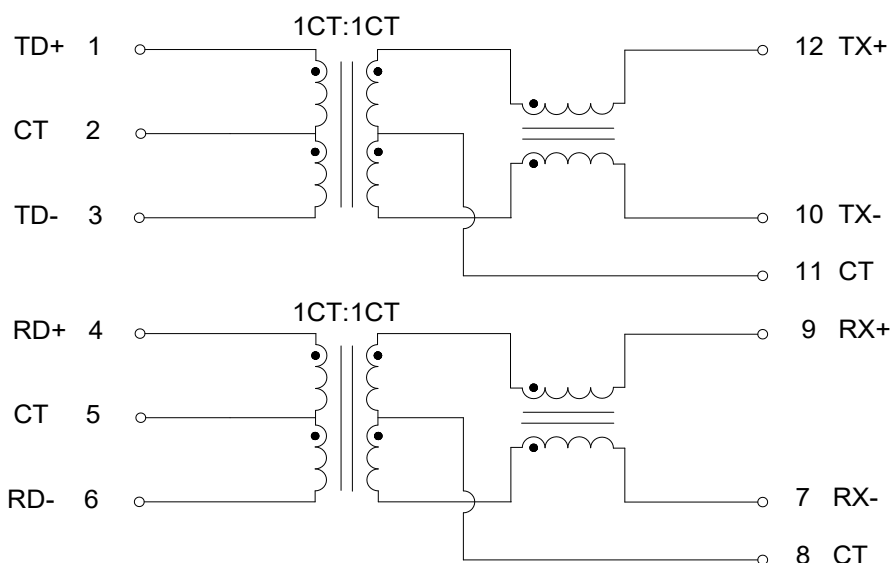
A. MECHANICAL(unit:mm)



Suggested PAD Layout



B. Schematics

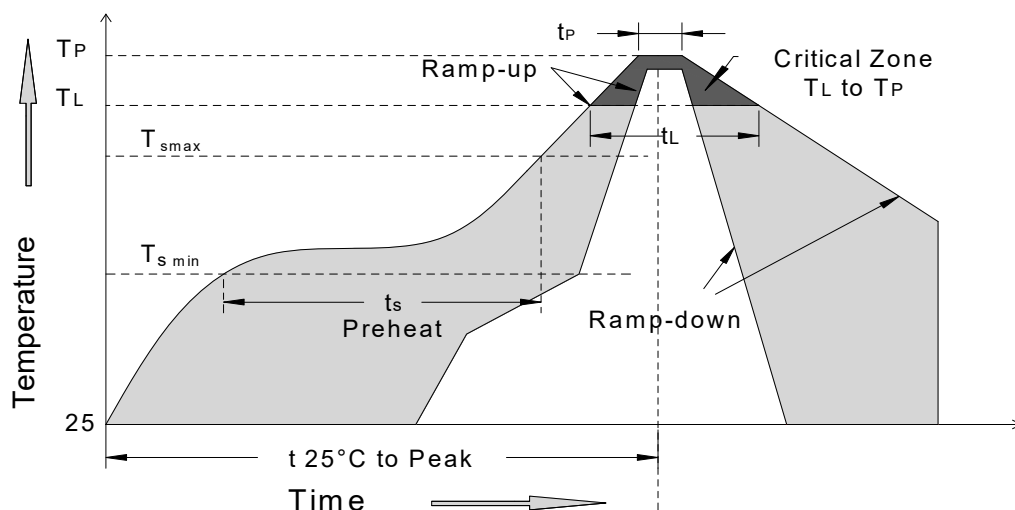


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C. ELECTRICAL SPECIFICATIONS @25°C

Unless Otherwise Specified, Testing is Performed at 25°C ± 5°C

1. OCL(TD & RD): 400uH Typ. @ 100 KHz, 0.1V, 25°C
120uH Min. @ 100 KHz, 0.1V, -40°C~125°C
2. Leakage Inductance(TD & RD, TX & RX shorted): 0.5uH Max @ 100KHz, 0.1V
3. DCR: 1200mΩ Max
4. Turns Ratio(Pri to Sec): 1CT:1CT±2%
5. Insertion Loss(TD to TX & RD to RX): -0.40 dB Max @ 4 MHz
6. Return Loss(TD & RD, TX & RX with 100 ohm load): -20 dB Min @ 4 MHz
7. Crosstalk Adjacent Channels (TD to RD): -50 dB Min @ 4 MHz
8. Common Mode Rejection(TD to TX & RD to RX): -35 dB Min @ 1-10 MHz
-20 dB Min @ 10-100 MHz
9. Differential to common rejection ratio: -35 dB Min @1-30MHz
-30 dB Min @ 30-80 MHz
-25 dB Min @ 80-100 MHz
10. Isolation Hipot: 4300VDC 1mA 60S (Equivalent to 3100VAC 1mA 60S) or 3700VAC 1mA 2s
11. Reinforced Insulation At a Working Voltage Of 1600VDC And The Creepage Distance Of 30mm Min
12. Insulation Resistance:400 Mohm Min
13. Operating Temperature: -40°C to +125°C
14. Storage Temperature(With Package): +10°C to +40°C
15. Storage Temperature(Without Package, Just For Components): -40°C to +125°C
16. RoHS Compliant

D. RECOMMEND REFLOW SOLDERING CURVE

MSL:

Grade: 1 level. Floor life: 0.5 year Condition: ≤30°C/60%RH.

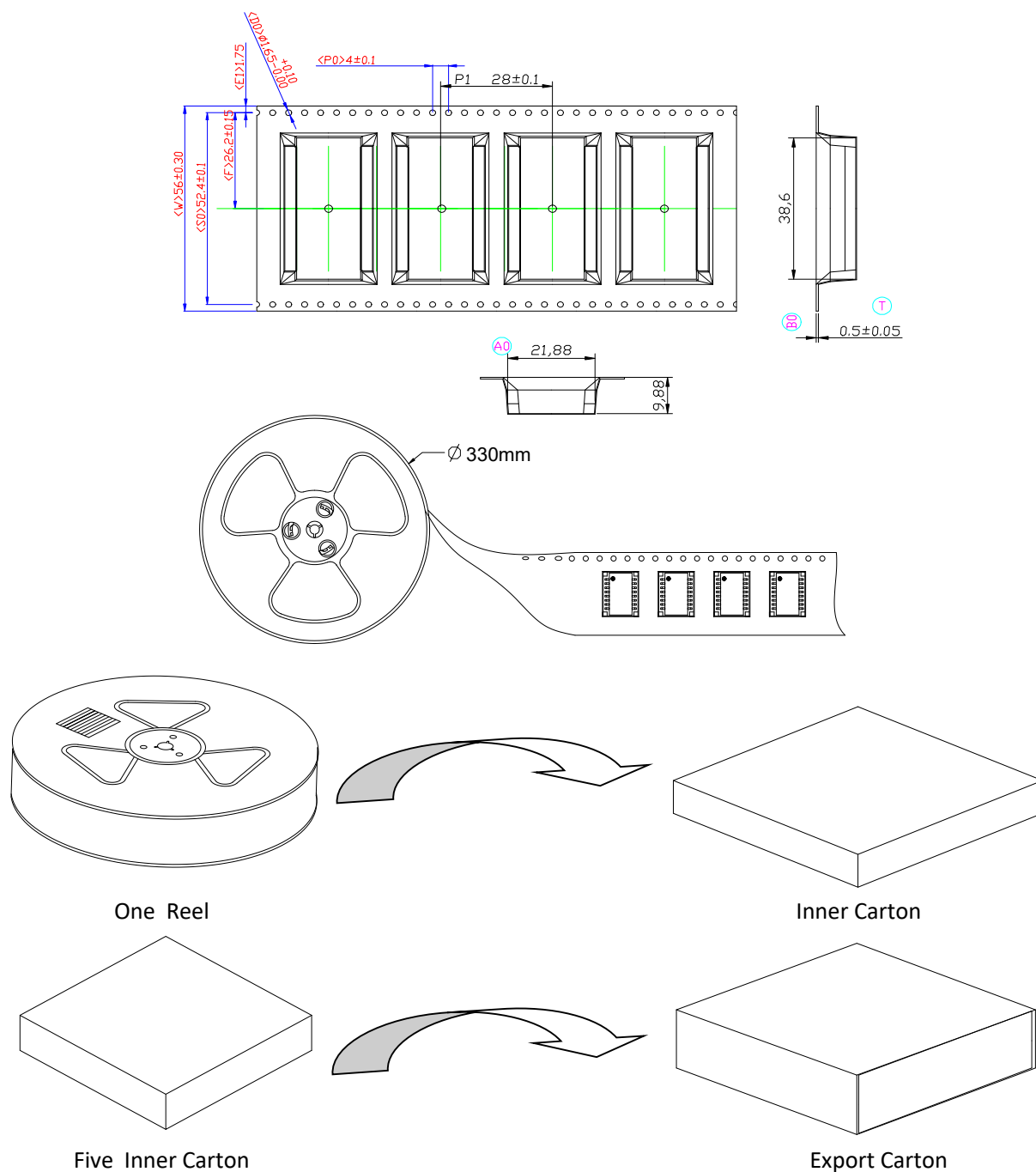
Ramp up rate=3°C/s max Ramp down rate=6°C/s max

TL=217°C tL=60s-150s Tp=250+/-3°C Time within 5°C of actual Peak Temperature (tp): 20~40s

Ts min=150°C Ts max=200°C Ts min to Ts max: 60s-180s, 25°C to peak Temperature: 8minutes max

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E. Packaging specification



Package Quantity:

One Reel=200Pcs

One Inner Carton=200*1=200Pcs

One Export Carton=200*5=1000Pcs

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