

Specification for Approval

Customer:	
Customer P/N:	
EEC P/N:	SG24701F0
Spec No.:	
Version No.:	V0.1
Description:	100/1000 BASE-T
	Laser Marking

Customer Approval		EEC Approval	
Inspected By:		Issued By:	Yuging,He
Checked By:		Checked By:	/
Approved By:		Approved By:	Jerry
Approved Date:		Issued Date:	2025/6/25

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.

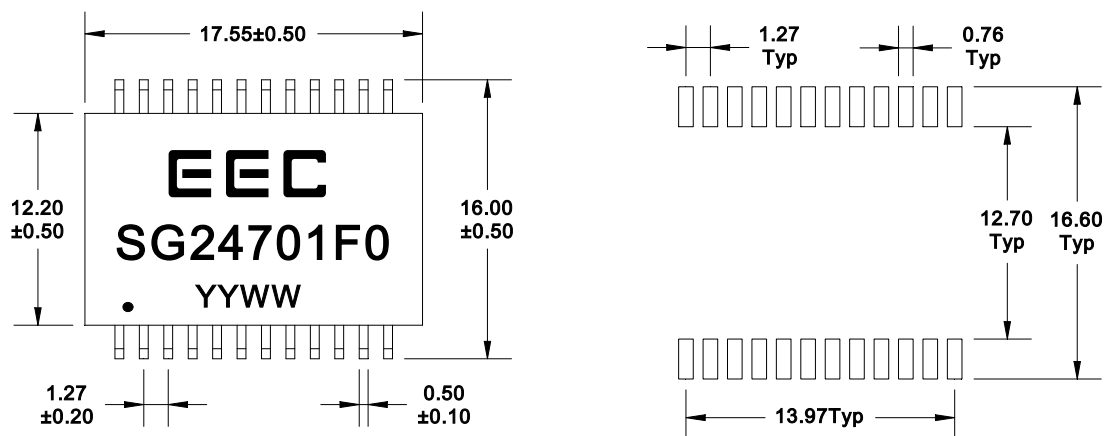


绵阳敦源电子科技有限公司
Mianyang Dunyuan Electronics Technology Co.,Ltd
地址：四川省绵阳市高新区综合保税区
ADD: Comprehensive Bonded Zone, High-Tech Industrial Development Zone Mianyang, SiChuan

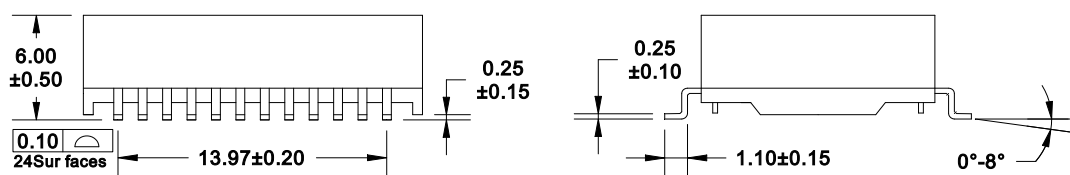
[illegible]

DESCRIPTION	EEC P/N:	SPEC NO	Version No.: V0.1
100/1000 BASE-T	SG24701F0		PAGE: 1/4

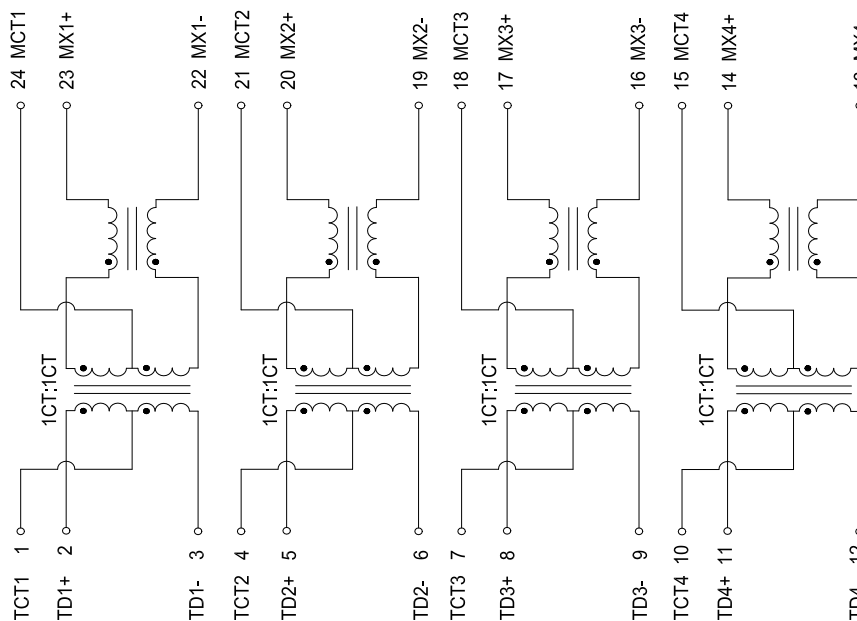
A. MECHANICAL(unit:mm)



Suggested PAD Layout



B. SCHEMATICS

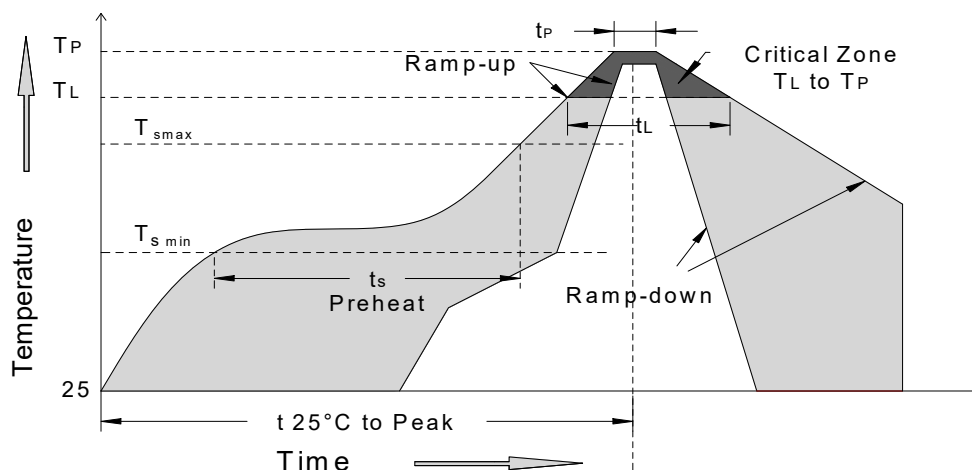


DESCRIPTION	EEC P/N:	SPEC NO	Version No.: V0.1
100/1000 BASE-T	SG24701F0		PAGE: 2/4

C. ELECTRICAL SPECIFICATIONS @25°C

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

1. OCL: 350uH Min @ 100 KHz, 0.1V 8mA DC BIAS
2. Leakage Inductance: 0.5uH Max @ 100KHz, 0.1V
3. DCR: 1400mΩ Max
4. Turns Ratio: 1CT:1CT±5%
5. Insertion Loss: -1.2 dB Max @ 0.5-1 MHz
-0.2-0.002*f^{1.4} dB Max @ 1-125 MHz
6. Return Loss: -16 dB Min @ 1-40 MHz
-10+20*log (f/80) dB Min @ 40.1-100 MHz
7. Cross Talk: -30 dB Min @ 1-100 MHz
8. Common Mode Rejection: -30 dB Min @ 1-100 MHz
9. Isolation Hipot: 3000VAC 1mA 2S
10. Operating temperature -40°C to +85°C (Include The Temperature Rise)
11. Storage temperature -40°C to +85°C
12. IEEE802.3at compliant performance---720mA Current Capability

D. RECOMMEND REFLOW SOLDERING CURVE

MSL:

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

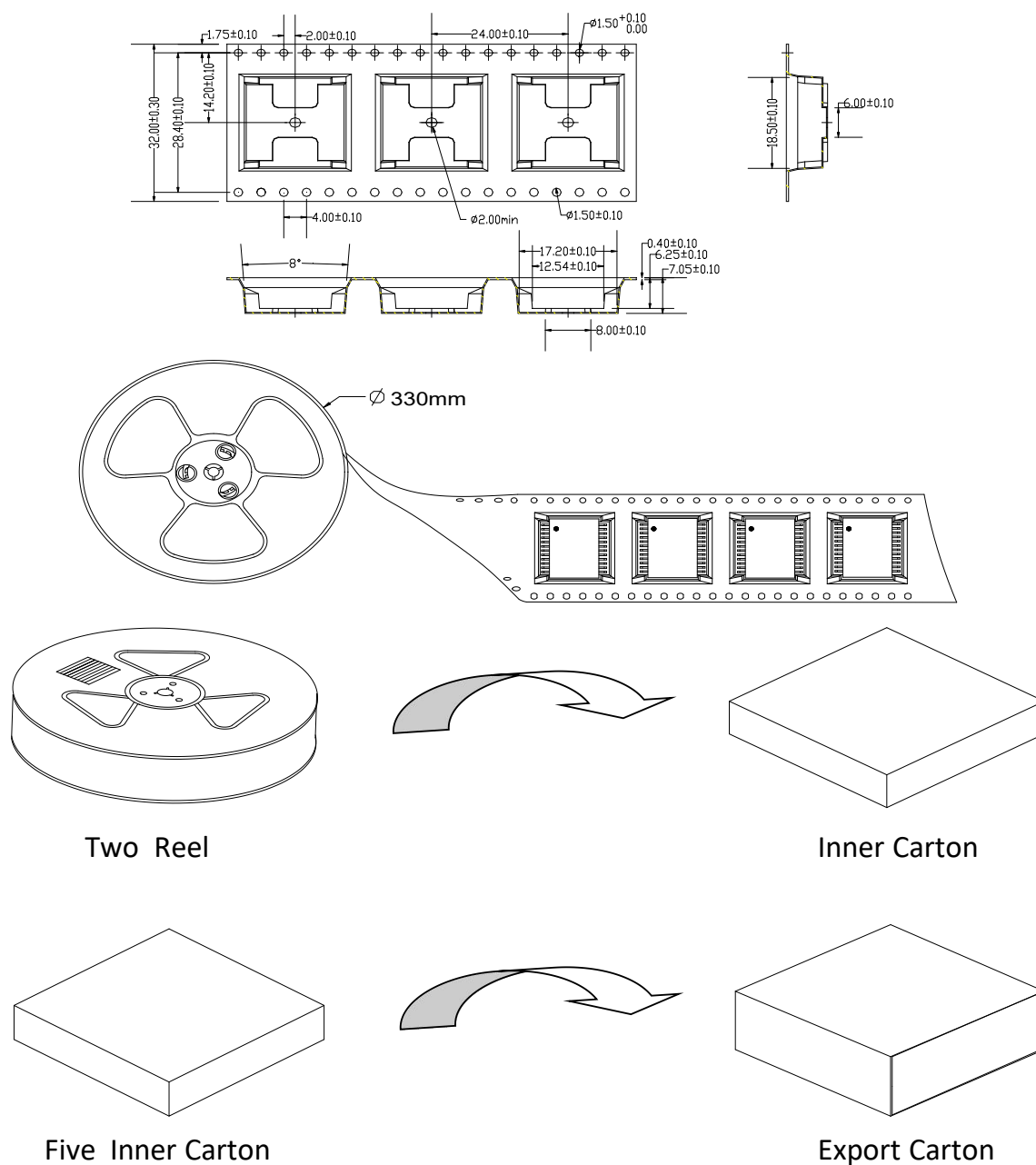
Ramp up rate=3°C/s max Ramp down rate=6°C/s max

TL=217°C tL=60s-150s Tp=250+/-3°C Time within ±3°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

DESCRIPTION	EEC P/N:	SPEC NO	Version No.: V0.1
100/1000 BASE-T	SG24701F0		PAGE: 3/4

E. PACKAGE INFORMATION



Package Quantity:

One Reel=350Pcs

One Inner Carton=350*2=700Pcs

One Export Carton=700*5=3500Pcs

DESCRIPTION	EEC P/N:	SPEC NO	Version No.: V0.1
100/1000 BASE-T	SG24701F0		PAGE: 4/4