

Specification for Approval

Customer:	
Customer P/N:	
EEC P/N:	SM24702P3
Spec No.:	
Version No.:	V0.1
Description:	10G BASE-T

Customer Approval		EEC Approval	
Inspected By:		Issued By:	Yuqing,He
Checked By:		Checked By:	/
Approved By:		Approved By:	Jerry
Approved Date:		Issued Date:	2025/10/21

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

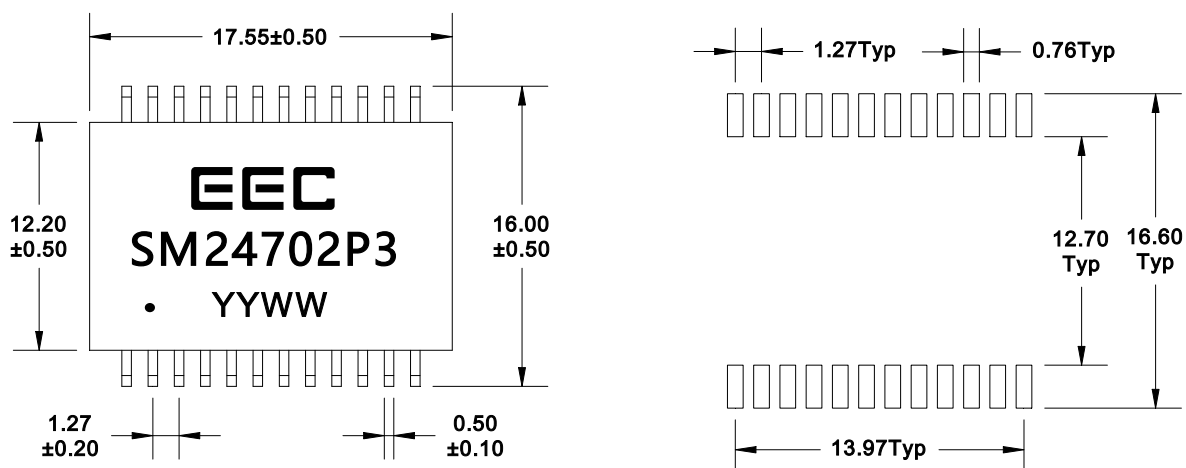
Specification for Approval

Revision History

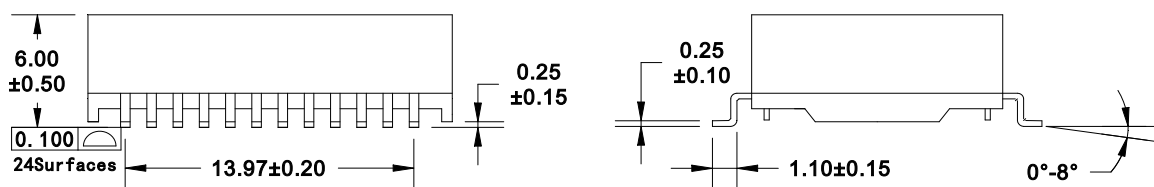
[illegible]

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A. MECHANICAL(unit:mm)

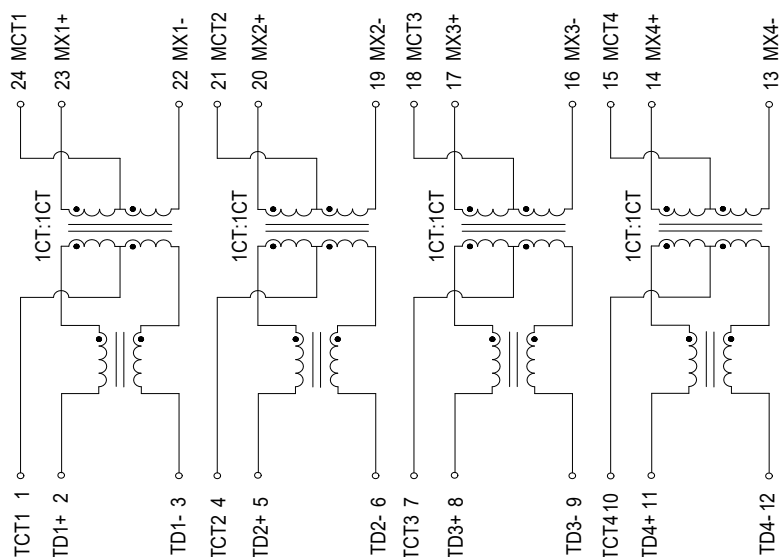


Suggested PAD Layout



B. Schematics

Cable Side



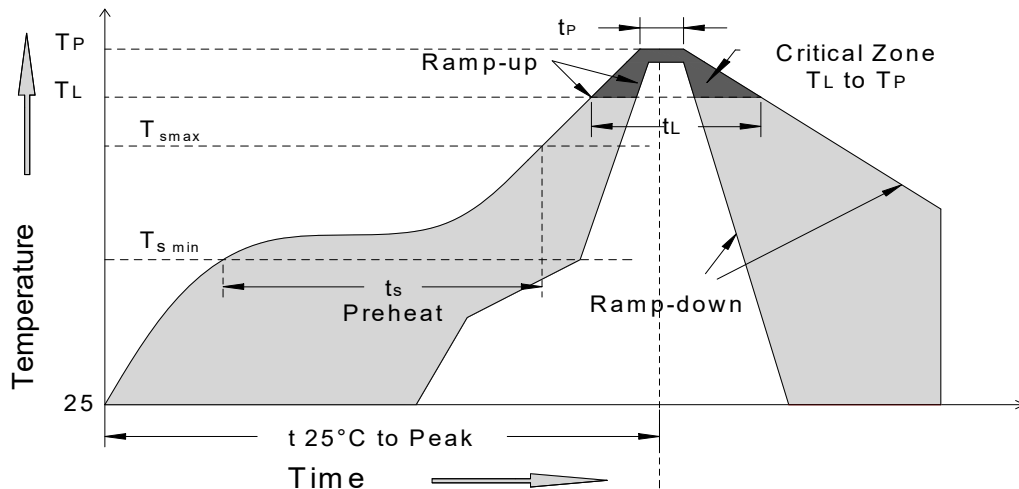
Chip Side

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C. ELECTRICAL SPECIFICATIONS @25°C

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

1. OCL: 120 uH Min @100KHz 100mV with 11mA DC Bias
2. Leakage Inductance: 0.5uH Max @ 100KHz, 0.1V
3. DCR: 1000mΩ Max
4. Turns Ratio: 1CT:1CT±5%
5. CW/W: 28 pF Max @ 100KHz, 0.1V
6. Insertion Loss: -1.0dB max @ 1-300 MHz
-1.5dB max @ 300-400 MHz
-2.0dB max @ 400-500 MHz
7. Return Loss: -18 dB Min @ $1 \leq f \leq 40$ MHz
-(18-10 log₁₀(f /40)) dB Min @ $40 < f \leq 400$ MHz
-(8-30 log₁₀(f /400)) dB Min @ $400 < f \leq 500$ MHz, where f is in MHz
8. Cross Talk: -40 dB Min @ 1-100 MHz
-30 dB Min @ 100-500 MHz
9. DCMR: -30 dB Min @ 1-250 MHz
-22 dB Min @ 250-500 MHz
10. Isolation Hipot: 1500VAC 1mA 60S
11. Operating temperature 0°C to +70°C
12. Storage temperature -40°C to +85°C
13. PoE Support 30W: Each channel support 720mA DC balance current

D. RECOMMEND REFLOW SOLDERING CURVE

MSL:

Grade: 1 level. Floor life: 0.5 year Condition: $\leq 30^\circ\text{C}/60\%\text{RH}$.

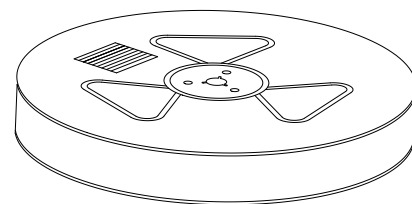
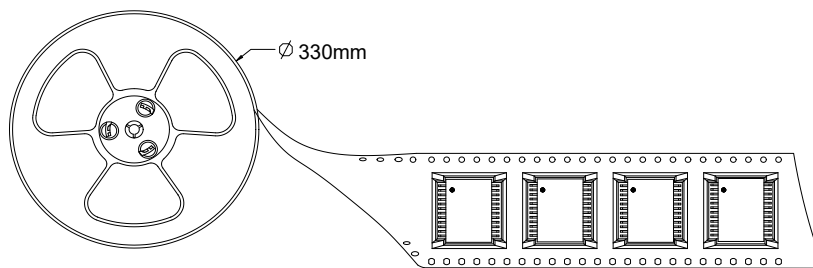
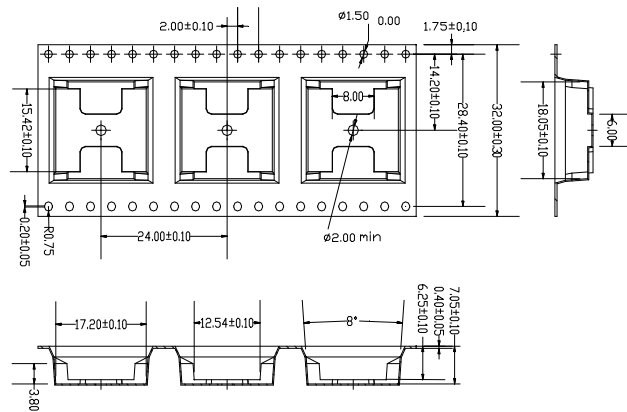
Ramp up rate= 3°C/s max Ramp down rate= 6°C/s max

$T_L=217^\circ\text{C}$ $t_L=60\text{s}-150\text{s}$ $T_P=250\pm 3^\circ\text{C}$ Time within 5°C of actual Peak Temperature (tp): 20~40s

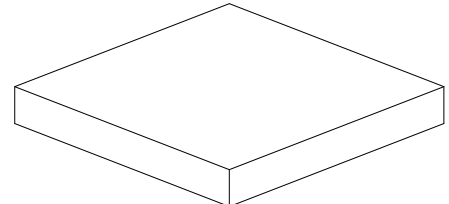
$T_{s \min}=150^\circ\text{C}$ $T_{s \max}=200^\circ\text{C}$ $T_{s \min}$ to $T_{s \max}$: 60s-180s, 25°C to peak Temperature: 8minutes max

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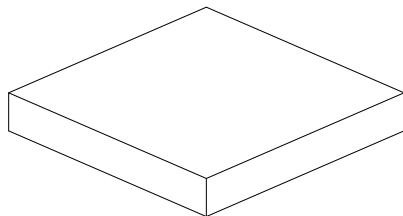
E. Packaging specification



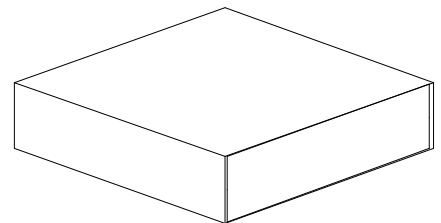
Two Reel



Inner Carton



Five Inner Carton



Export Carton

Package Quantity:

One Reel=350Pcs

One Inner Carton=350*2=700Pcs

One Export Carton=700*5=3500Pcs

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