

10/100BASE - TX SINGLE PORT TRANSFORMER MODULE



Ruggedized



- Compliant with IEEE 802.3u & ANSI X3.263 standards
- 350µH OCL with 8mA D.C.bias
- Operating and storage temperature:
 - 100B-1001 & 100B-1003: -40°C to +85°C
 - 100B-1001X & 100B-1003X: -55°C to +125°C
- Moisture Sensitivity Level: 3
- Maximum Isolation Voltage: 1500 VAC

Electrical Specifications @ 25°C

| Part Number | Insertion Loss (dB MAX) | | | | | Return Loss (dB MIN) | | | | | Crosstalk (dB MIN) | | | | DM to CM Rejection Ratio (dB MIN) | | | |
|-------------|-------------------------|--------|--------|--------|---------|----------------------|--------|--------|--------|--------|--------------------|--------|--------|--------|-----------------------------------|--------|--------|---------|
| | 0.10 MHz | 30 MHz | 60 MHz | 80 MHz | 100 MHz | 2 MHz | 30 MHz | 50 MHz | 60 MHz | 80 MHz | 16 MHz | 30 MHz | 60 MHz | 80 MHz | 0.10 MHz | 30 MHz | 60 MHz | 100 MHz |
| 100B-1001 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 18 | 18 | 14 | 12 | 12 | 48 | 44 | 40 | 38 | 45 | 40 | 30 | 30 |
| 100B-1001X | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 18 | 18 | 14 | 12 | 10 | 48 | 44 | 40 | 38 | 45 | 40 | 30 | 33 |
| 100B-1003 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 20 | 20 | 14 | 12 | 12 | 48 | 45 | 40 | 38 | 45 | 40 | 35 | 35 |
| 100B-1003X | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 20 | 20 | 14 | 12 | 12 | 48 | 45 | 40 | 38 | 45 | 40 | 35 | 35 |

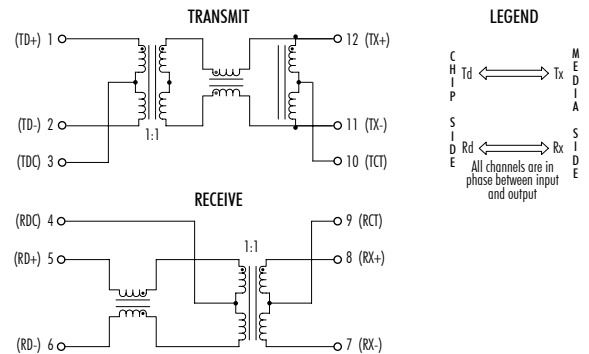
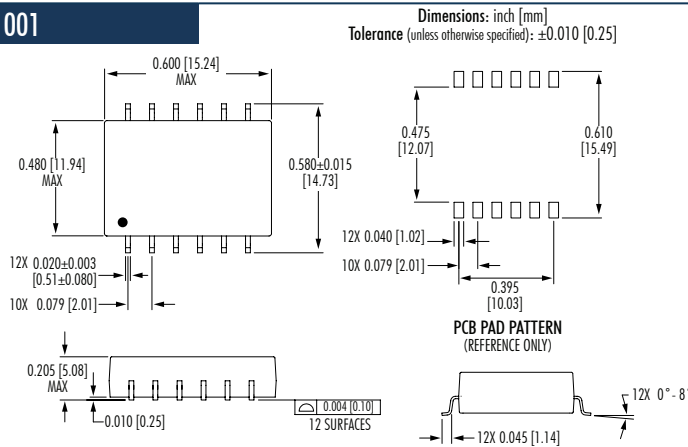
NOTES:

- Standard Parts have Sn63/Pb37 Lead Finish (MSL:3)
- Add suffix "NL" for RoHS compliant version; i.e. 100B-1001 becomes 100B-1001NL. NL parts have 100% SN Lead Finish (MSL:4)
- For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. 100B-1003XNLT

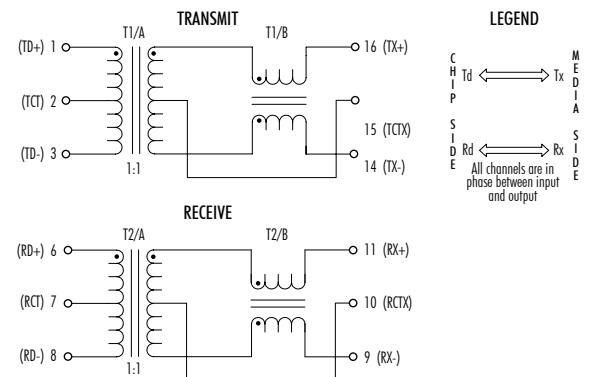
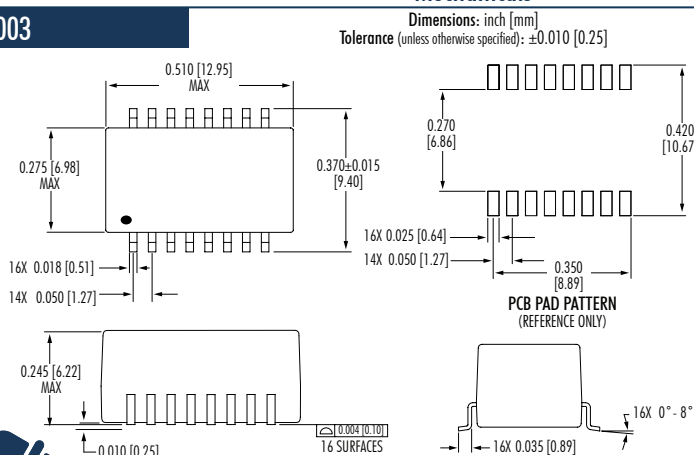
Mechanicals

Electrical Schematics

100B-1001



100B-1003



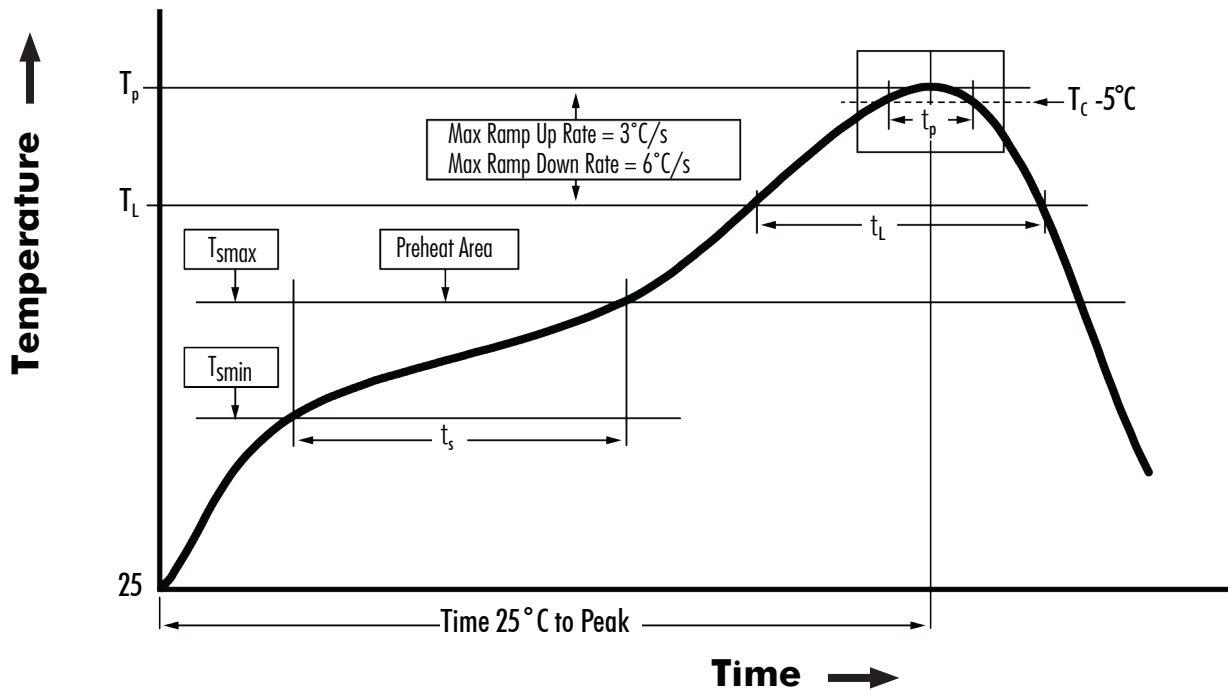
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Tin/Lead Recommended Reflow Profile (Based on J-STD-020D)



| T_{SMIN} (°C) | T_{SMAX} (°C) | T_L (°C) | T_P (°C MAX) | t_s (s) | t_L (s) | t_p (s MAX) | Ramp-up rate (T_L to T_p) | Ramp-down rate (T_p to T_L) | Time 25°C to peak temperature (s MAX) |
|--------------------|--------------------|---------------|-------------------|--------------|--------------|------------------|------------------------------------|--------------------------------------|---|
| 100 | 150 | 183 | 235 | 60 - 120 | 60 - 150 | 20 | 3°C/s MAX | 6°C/s MAX | 360 |

NOTES:

1. All temperatures measured on the package leads.
2. Maximum times of reflow cycle: 2



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