

- Compliant with IEEE 802.3 standards
- Transmit channel OCL, 350 μ H MIN with 8mA DC bias
- Low profile surface mount package, open construction
- Dielectric Withstanding Voltage (DWV): 1500 Vrms
- Operating Temperature: 0°C to +70°C
- Storage Temperature: -55°C to +125°C
- Lead Finish: Sn63/Pb37
- Moisture Sensitivity Level: 1

Electrical Specifications @ 25°C

| Part Number | Turns Ratio ($\pm 5\%$) | Insertion Loss (dB MAX) | | | | Return Loss (dB MIN) | | | | Crosstalk (dB MIN) | | | DM to CM Rejection (dB MIN) | | |
|-------------|---------------------------|-------------------------|--------|--------|---------|----------------------|--------|--------|--------|--------------------|--------|---------|-----------------------------|--------|---------|
| | | 0.10 MHz | 10 MHz | 50 MHz | 100 MHz | 5 MHz | 30 MHz | 60 MHz | 80 MHz | 30 MHz | 60 MHz | 100 MHz | 30 MHz | 60 MHz | 100 MHz |
| 100B-1049 | 1CT:1CT | TX 1.2 RX 2.0 | 1.0 | 1.0 | 1.0 | 18 | 16 | 12 | 10 | 45 | 40 | 35 | 42 | 37 | 33 |

NOTES:

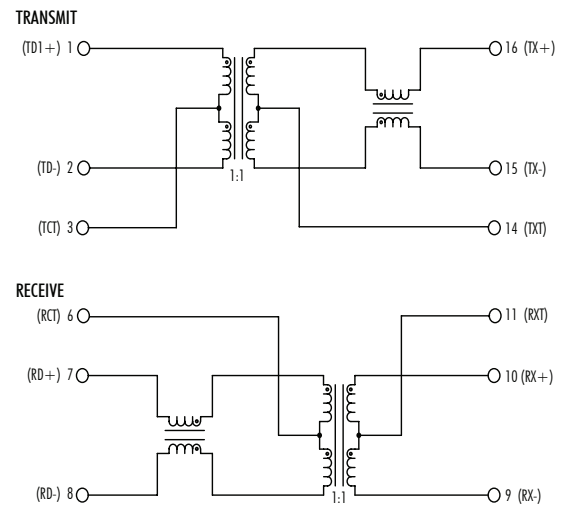
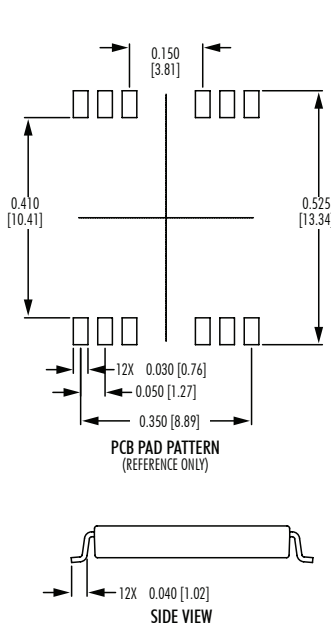
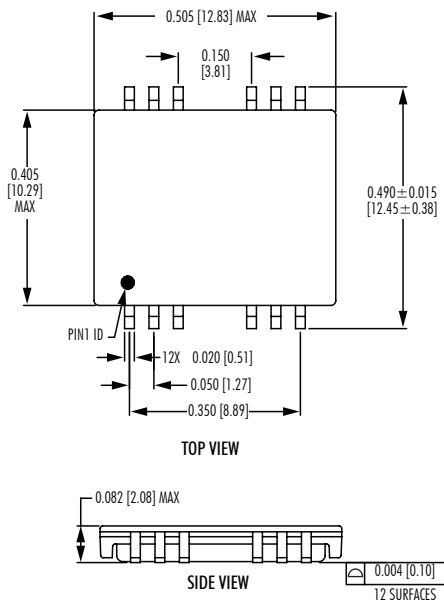
- Add suffix "NL" for RoHS compliant version; i.e. 100B-1049 becomes **100B-1049NL**. NL parts have 100% SN Lead Finish.
- For Tape and Reel Packaging, add "T" suffix at the end of the part number; i.e. **100B-1049T**.

Mechanicals

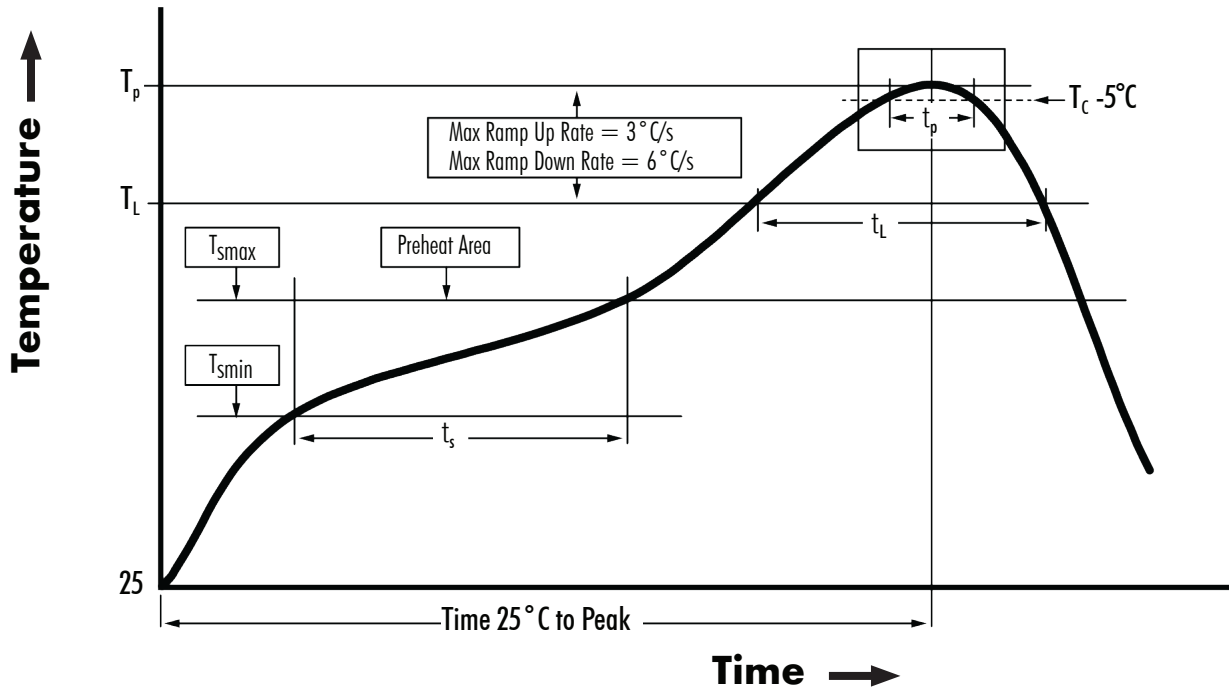
Electrical Schematics

100B-1049

Dimensions: inch [mm]
Tolerance (unless otherwise specified): ± 0.010 [0.25]



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) |
|-------------------------|--------------------|---------------|-------------------|--------------|--------------|------------------|------------------------------------|--------------------------------------|---|
| Tin/Lead Profile | | | | | | | | | |
| 100 | 150 | 183 | 220 | 60 - 120 | 60 - 150 | 20 | 3°C/s MAX | 6°C/s MAX | 360 |
| Non-Lead Profile | | | | | | | | | |
| 150 | 200 | 217 | 245 | 60 - 120 | 60 - 150 | 30 | 3°C/s MAX | 6°C/s MAX | 480 |

NOTES:

1. All temperatures measured on the package leads.
2. Maximum number of reflow cycles not to exceed 2.
3. Reflow cycle applies only to surface mount parts.

