

# 100BASE-T SINGLE PORT TRANSFORMER MODULES

Ruggedized

- Compliant with IEEE 802.3 Standard
- 350 $\mu$ H OCL with 8mA DC bias
- Dielectric Withstanding Voltage (DWV): 1500 Vrms
- Operating Temperature: -40°C to +85°C
- Storage Temperature: -55°C to +125°C
- Lead Finish: Hot Dip Sn63/Pb37 Solder
- Moisture Sensitivity Level: 3

## 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	62 MHz	100 MHz	30 MHz	60 MHz	100 MHz
100B-1049	1CT:1CT	1.0	1.0	1.0	1.0	18	16	12	12	45	40	35	42	37	33

### NOTES:

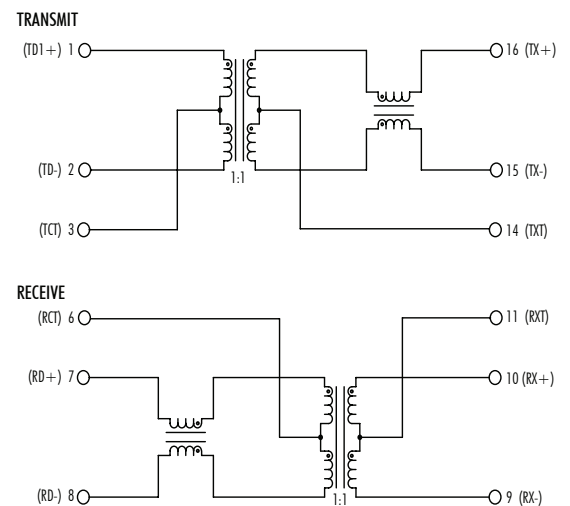
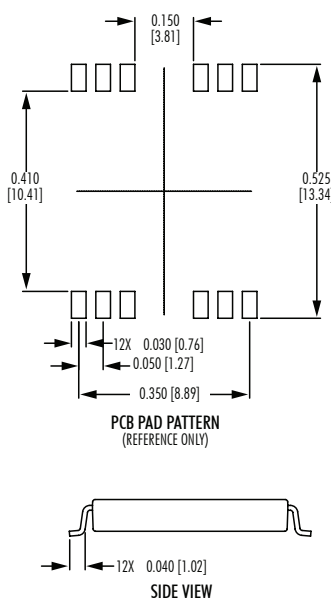
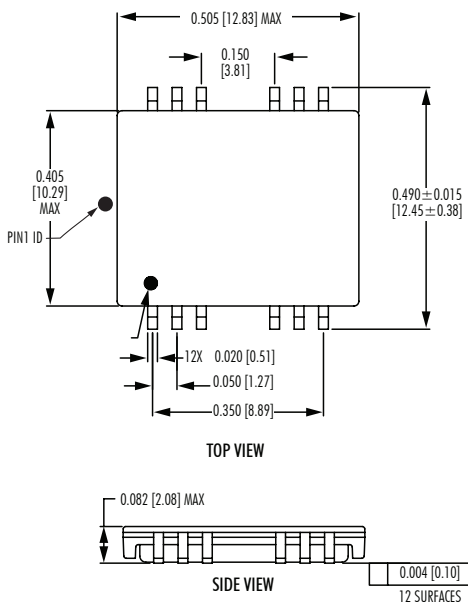
- Add suffix "NL" for RoHS compliant version; i.e. 100B-1049A becomes **100B-1049NL**. NL parts have 100% SN Lead Finish.
- For Tape and Reel Packaging, add "T" suffix at the end of the part number; i.e. **100B-1049T**.

### Mechanicals

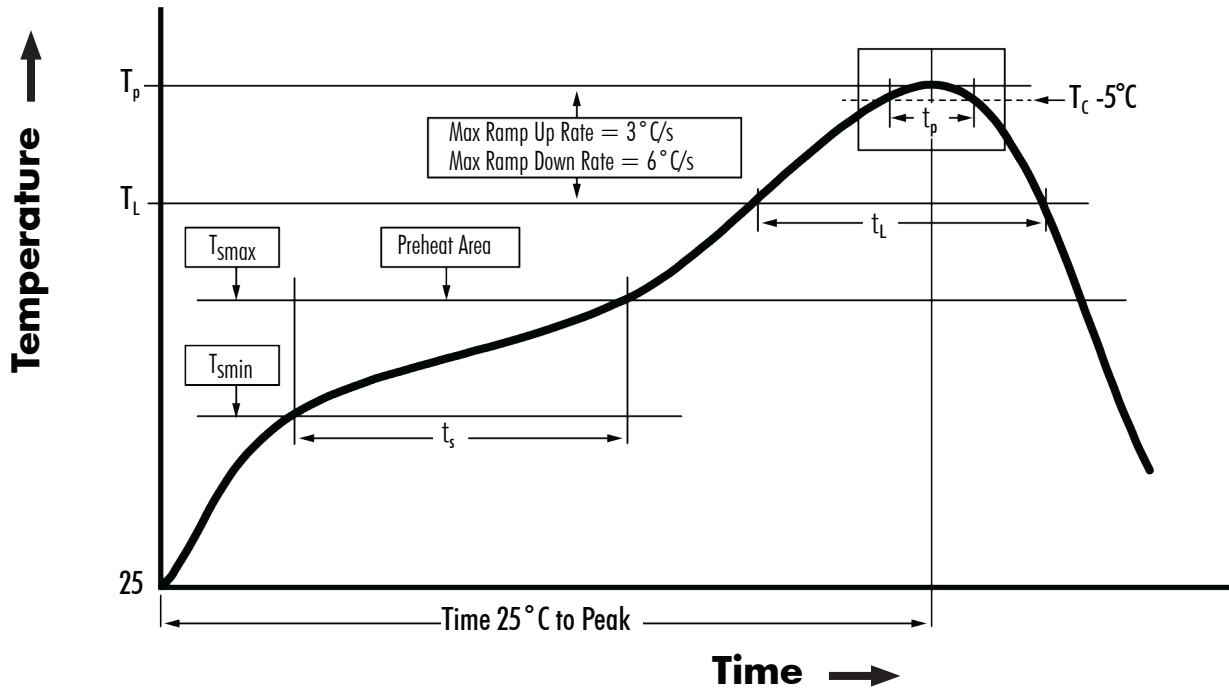
### Electrical Schematics

100B-1049

Dimensions: inch [mm]  
Tolerance (unless otherwise specified):  $\pm 0.010$  [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)
<b>Tin/Lead Profile</b>									
100	150	183	220	60 - 120	60 - 150	20	3°C/s MAX	6°C/s MAX	360
<b>Non-Lead Profile</b>									
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.

