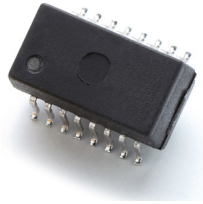


# 10/100 BASE-TX SINGLE PORT TRANSFORMER MODULE



Ruggedized



- ⊗ Compliant with IEEE 802.3
- ⊗ 350μH OCL with 8mA bias at extended temperatures
- ⊗ Operating Temperature:
  - 100B-1027: -40°C to +85°C
  - 100B-1027X: -55°C to +125°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	Insertion Loss (dB MAX)					Return Loss (dB MIN)						Crosstalk (dB MIN)			DM to CM Rejection Ratio (dB MIN)			Dwv (Vrms)
	0.10 MHz	1 MHz	30 MHz	60 MHz	100 MHz	2 MHz	30 MHz	50 MHz	60 MHz	80 MHz	100 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz	
100B-1027	1.5	1.5	1.5	1.5	1.5	18	18	14	12	10	8	45	38	33	42	37	33	1500
100B-1027X	1.5	1.5	1.5	1.5	1.5	18	18	14	12	10	8	45	38	33	42	37	33	1500

### NOTES:

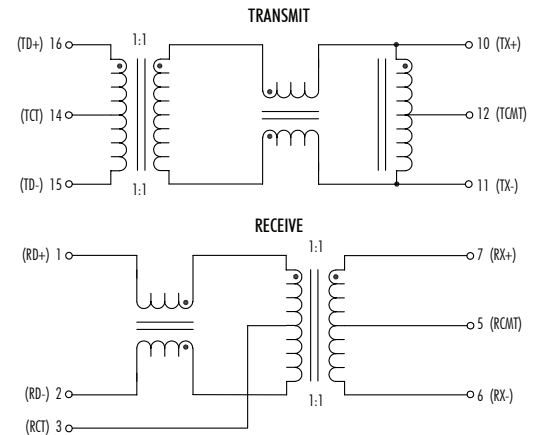
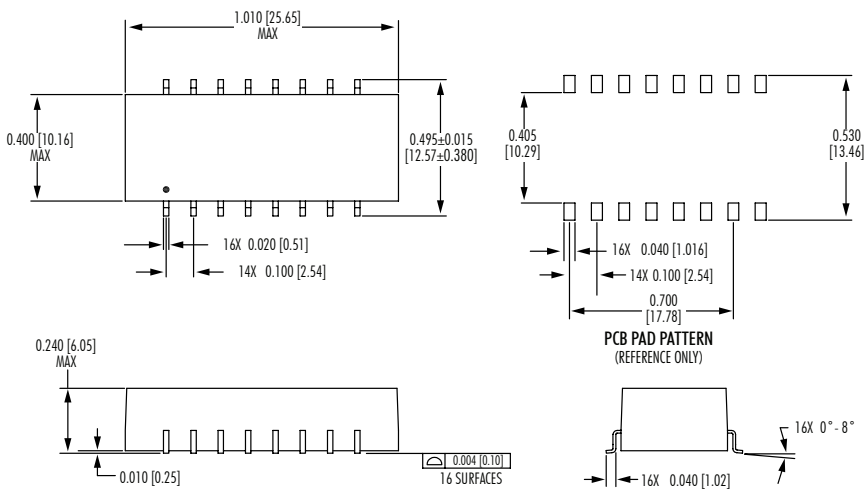
1. Add suffix "NL" for RoHS compliant version; i.e. 100B-1027 becomes 100B-1027NL. NL parts have 100% SN Lead Finish (MSL:4)
2. For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. 100B-1027XNLT

### Mechanicals

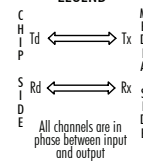
### Electrical Schematics

#### 100B-1027 / 100B-1027X

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



#### LEGEND

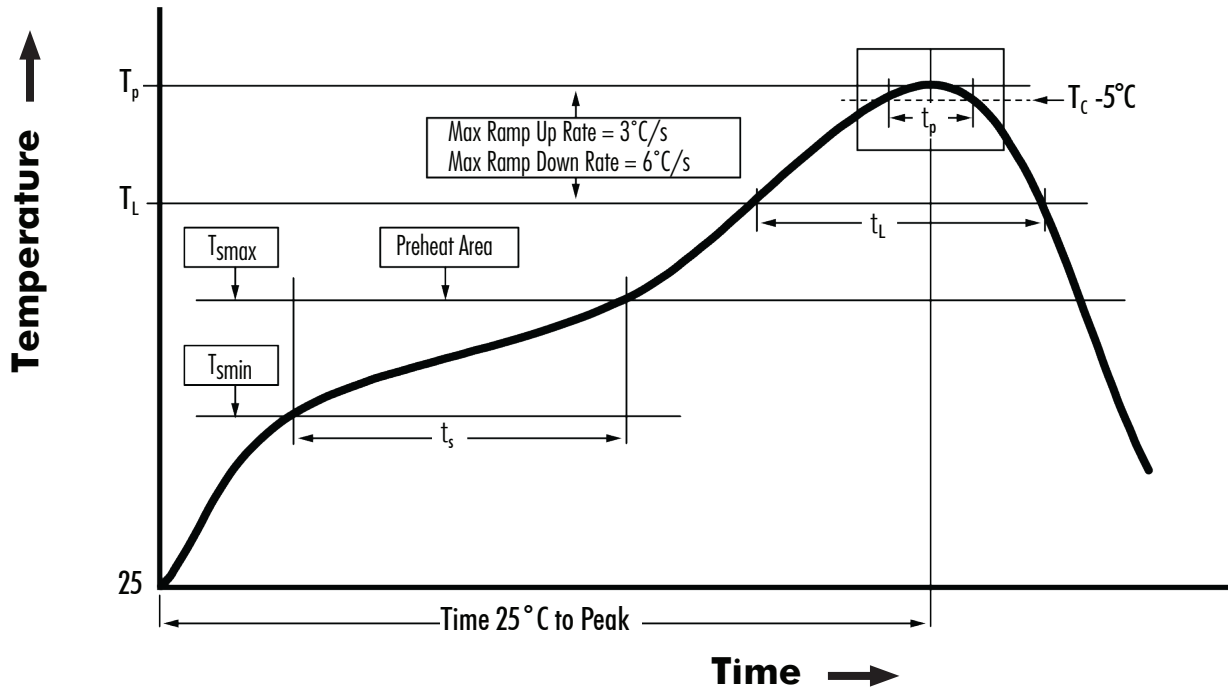


# 10/100 BASE-TX SINGLE PORT TRANSFORMER MODULE



Ruggedized

## 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)
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 times of reflow cycle: 2



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M289.D (10/21)