

# 10/100BASE - TX SINGLE PORT TRANSFORMER MODULE

Ruggedized



- Compliant with IEEE 802.3 standards
- 350pH OCL with 8mA DC bias
- Operating Temperature:  
100B-1022: -40°C to +85°C  
100B-1022X: -55°C to +125°C
- 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)			
	1 MHz	30 MHz	60 MHz	100 MHz	5 MHz	30 MHz	50 MHz	60 MHz	80 MHz	16 MHz	30 MHz	60 MHz	100 MHz	5 MHz	30 MHz	60 MHz	100 MHz
100B-1022	1.0	1.0	1.0	1.0	20	20	14	14	12	48	45	40	35	42	37	32	32
100B-1022X	1.0	1.0	1.0	1.0	20	20	14	12	12	48	45	40	35	42	37	32	32

### NOTES:

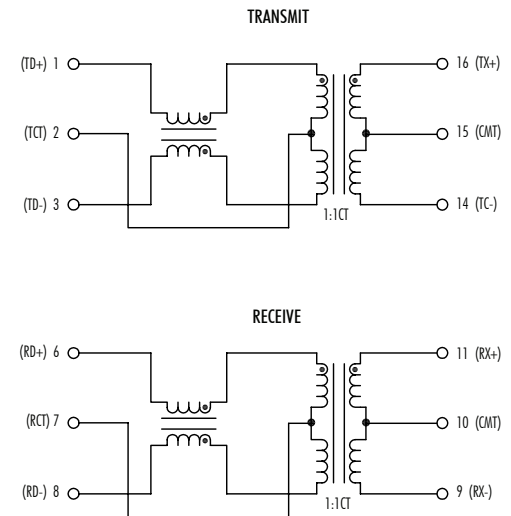
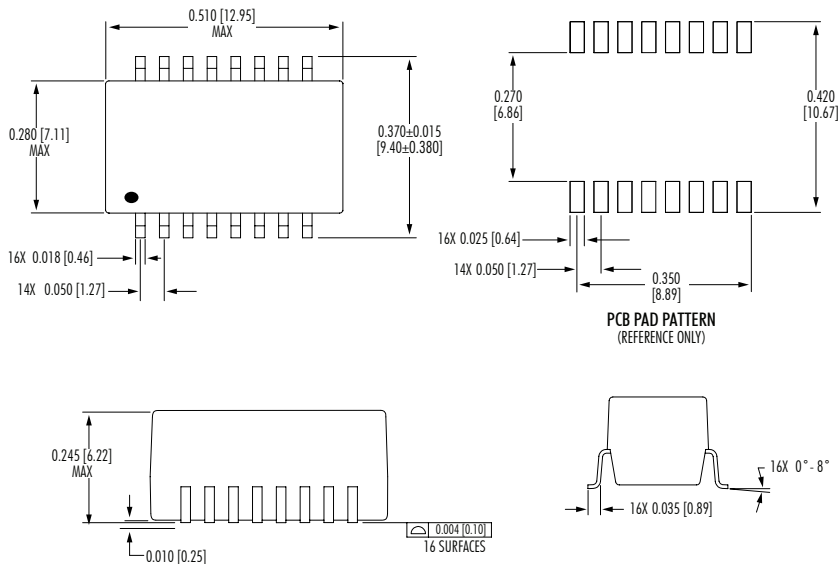
- Standard Parts have Sn63/Pb37 Lead Finish (MSL:3)
- Add suffix "NL" for RoHS compliant version; i.e. 100B-1001 becomes 100B-1022NL. NL parts have 100% SN Lead Finish (MSL:4)
- For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. 100B-1022XNLT.

## Mechanicals

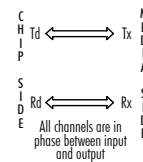
## Electrical Schematics

### 100B-1022 / 100B-1022X

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



### LEGEND



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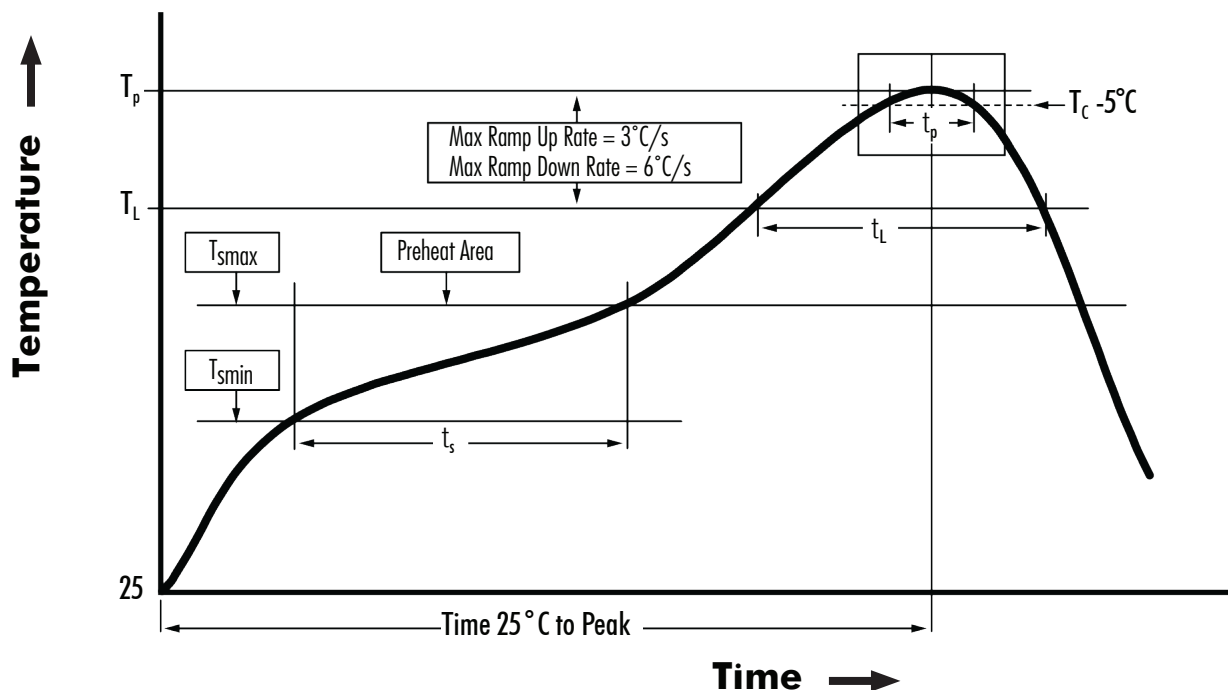
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## Tin/Lead Recommended Reflow Profile (Based on J-STD-020D)



$T_{smin}$ (°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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