

# 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

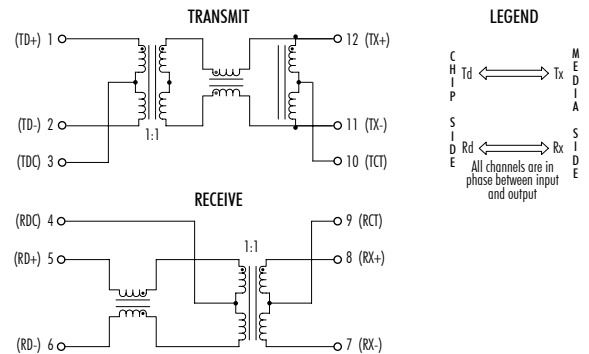
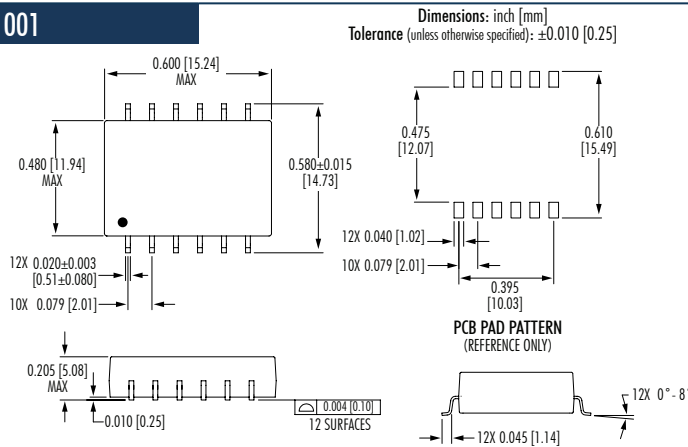
### NOTES:

- 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

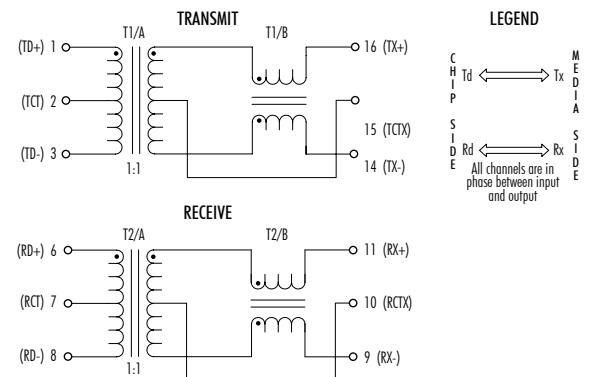
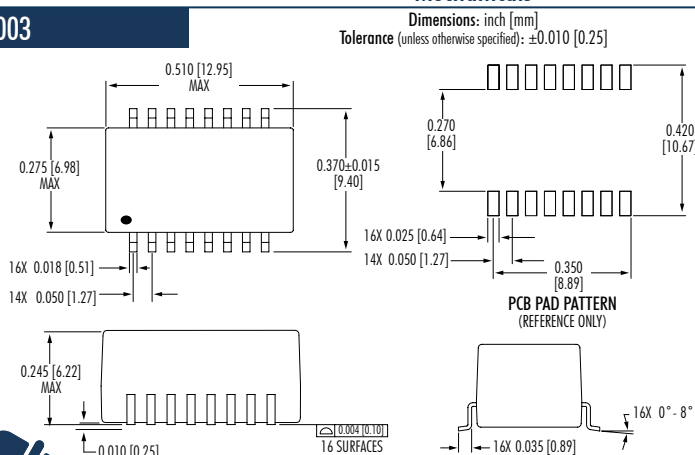
### Mechanicals

### Electrical Schematics

#### 100B-1001



#### 100B-1003



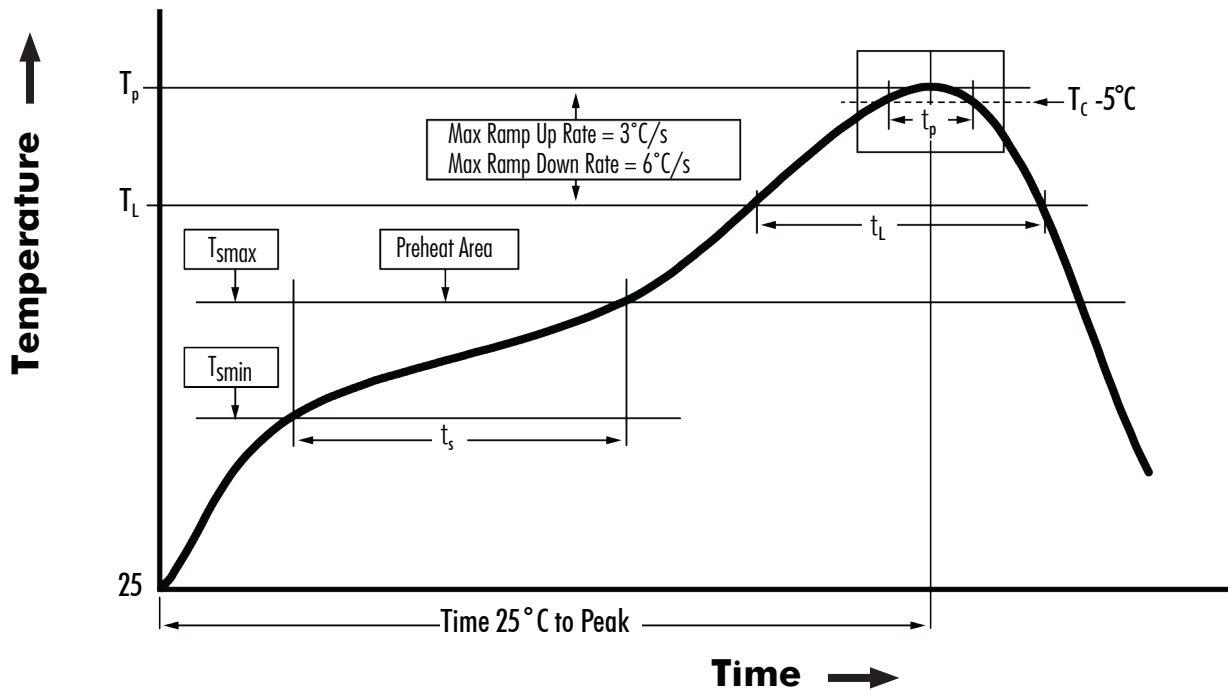
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## Tin/Lead Recommended Reflow Profile (Based on J-STD-020D)



$T_{SMIN}$ (°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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