

# 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

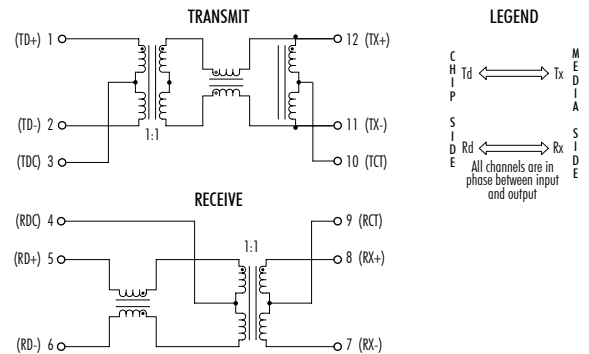
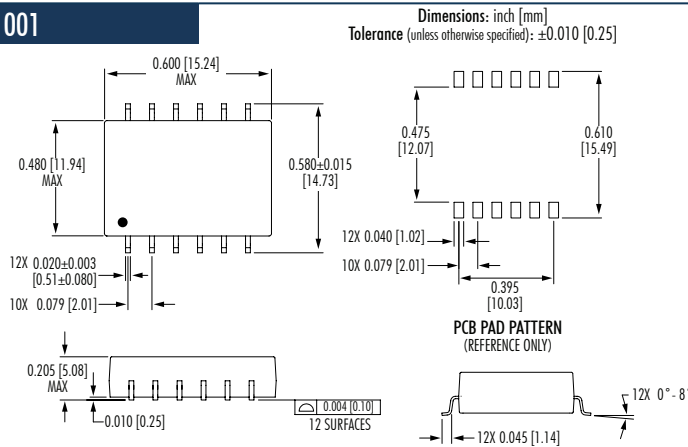
### NOTES:

- 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

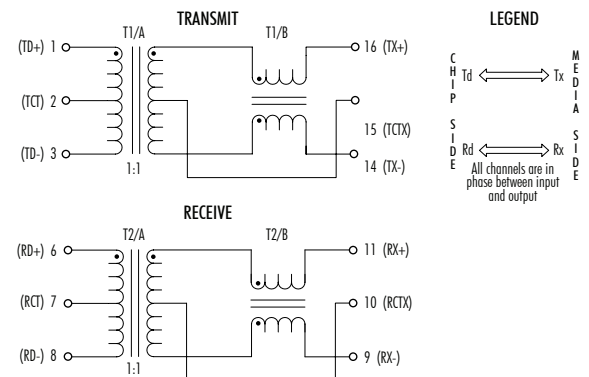
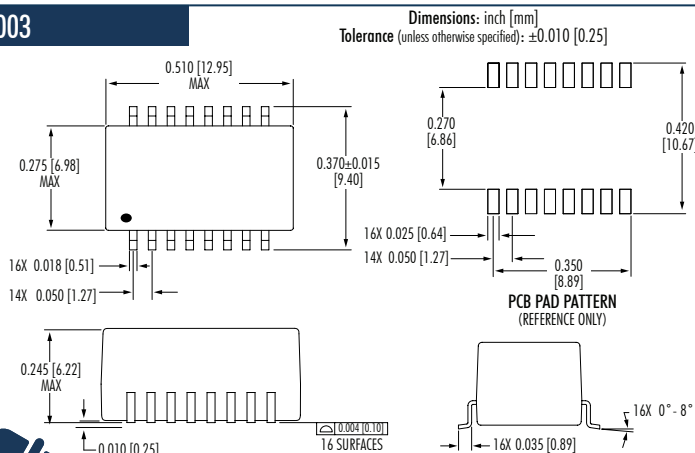
#### 100B-1001



### Mechanicals

### Electrical Schematics

#### 100B-1003



Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2020. iNRCORE, LLC. All rights reserved.

# 10/100BASE - TX SINGLE PORT TRANSFORMER MODULE



Ruggedized

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



$T_{S_{MIN}}$ (°C)	$T_{S_{MAX}}$ (°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



iNRCORE, LLC  
 311 Sinclair Road, Bristol, PA 19007-6812 USA  
 Tel: +1.215.781.6400 Fax: +1.215.781.6430

[www.iNRCORE.com](http://www.iNRCORE.com)

M101.U (10/21)

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2020. iNRCORE, LLC. All rights reserved.