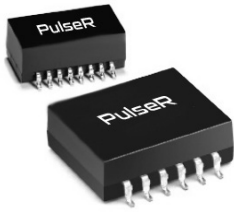


# 10/100BASE-TX Single-Port Transformer Modules

Ruggedized



- Compliant with IEEE 802.3u & ANSI X3.263 standards
- 350µH OCL with 8mA D.C.bias
- Operating and storage temperature:  
100B-1001F & 100B-1003: -40°C to +85°C  
100B-1001FX & 100B-1003X: -55°C to +125°C
- Moisture Sensitivity Level: 3
- RoHS version withstands 245°C
- AS9100C Certified (Based on and including ISO 9001:2008)
- Maximum Isolation Voltage: 1500 VAC

## Electrical Specifications @ 25°C

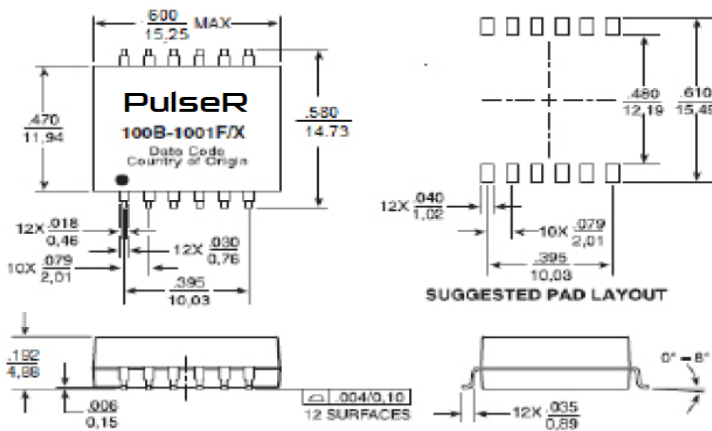
Part Number <sup>1</sup>	Insertion Loss (dB MIN)	Return Loss (dB MAX)				Crosstalk (dB MAX)				DM to CM Rejection Ratio (dB MAX)		
	0.1-100 MHz	2-30 MHz	50 MHz	60 MHz	80 MHz	16 MHz	30 MHz	60 MHz	80 MHz	0.1-30 MHz	30-60 MHz	60-100 MHz
100B-1001	-1.00	-18	-14	-12	-12	-48	-44	-40	-38	TX: -50 RX: -50	TX: -40 RX: -40	TX: -30 RX: -30
100B-1001X	-1.10	-18	-14	-12	-10	-48	-44	-40	-38	TX: -45 RX: -45	TX: -40 RX: -40	TX: -38 RX: -33
100B-1001F	-1.00	-18	-14	-12	-12	-48	-44	-40	-38	TX: -50 RX: -50	TX: -40 RX: -40	TX: -30 RX: -30
100B-1001FX	-1.10	-18	-14	-12	-10	-48	-44	-40	-38	TX: -45 RX: -45	TX: -40 RX: -40	TX: -38 RX: -33
100B-1003	-1.00	-20	-14	-12	-12	-48	-45	-40	-38	TX: -50 RX: -50	TX: -40 RX: -40	TX: -35 RX: -35
100B-1003X	-1.00	-20	-14	-12	-12	-48	-45	-40	-38	TX: -45 RX: -45	TX: -40 RX: -40	TX: -35 RX: -35
100B-1003F	-1.00	-20	-14	-12	-12	-48	-45	-40	-38	TX: -50 RX: -50	TX: -40 RX: -40	TX: -35 RX: -35
100B-1003FX	-1.00	-20	-14	-12	-12	-48	-45	-40	-38	TX: -45 RX: -35	TX: -40 RX: -35	TX: -35 RX: -35

- Notes:
- Standard Part have a Sn63/Pb37 Lead Finish (MSL:3)
  - Add suffix "NL" for RoHS compliant version; i.e. 100B-1001F becomes 100B-1001FNL. 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-1003FXNLT
  - Maximum Hi-Pot 1800VAC/2500VDC for 6 Sec.

## Mechanical

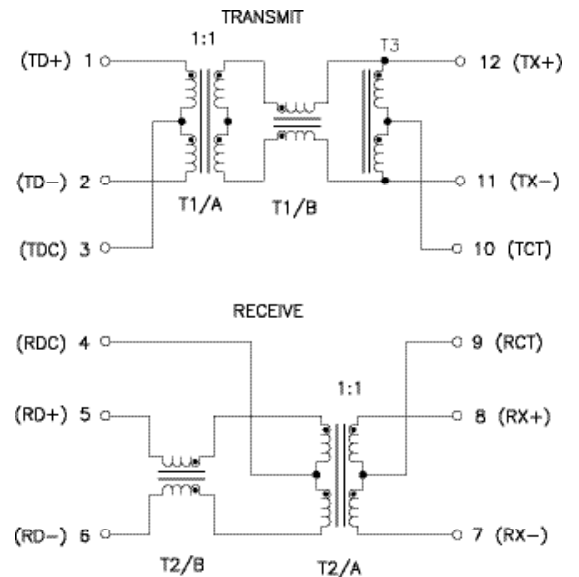
## Schematic

### 100B-1001F/X



Weight ..... 1.7 grams  
Tape and Reel ..... 350/reel  
Tray ..... 30/tray

Dimensions: Inches  
mm  
Unless otherwise specified, all tolerances are  $\pm .010$   
0,25



# 10/100BASE-TX Single-Port Transformer Modules

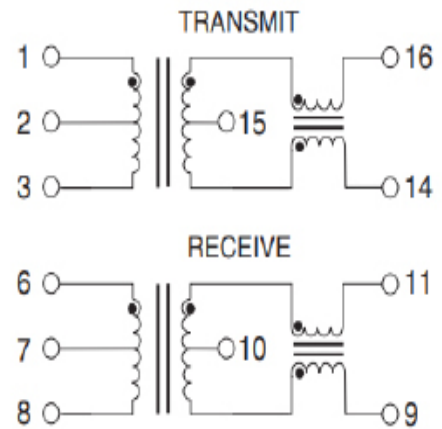
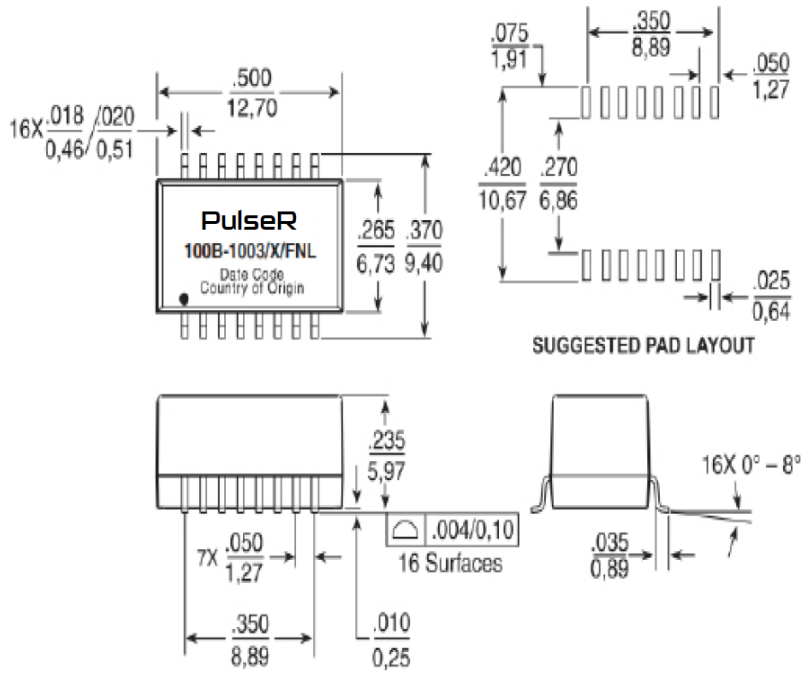
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## Mechanical

## Schematic

100B-1003/X/FNL



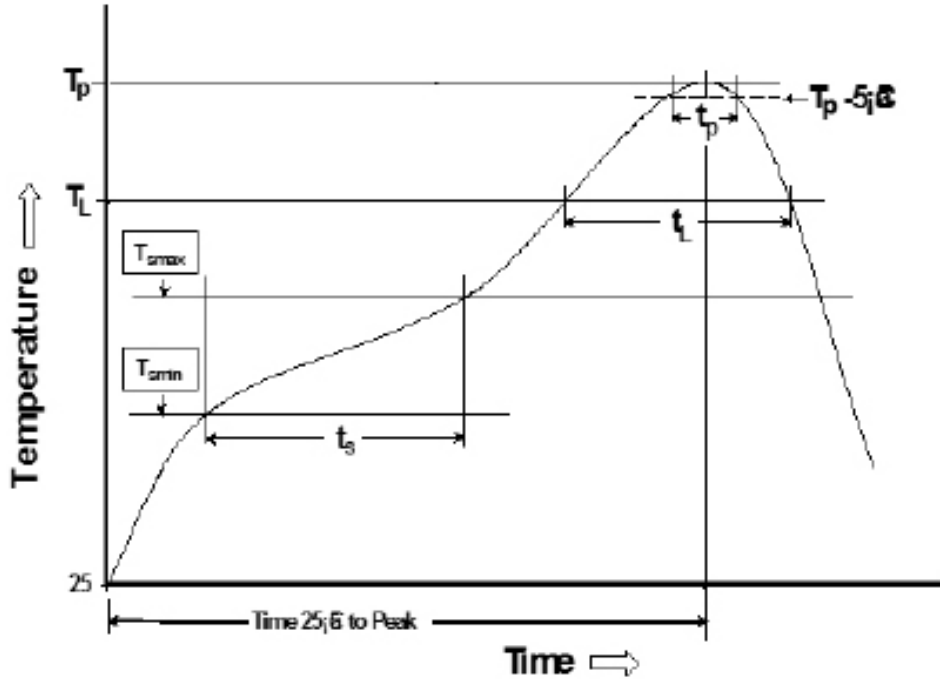
Weight.....1.16 grams

Dimensions:  $\frac{\text{inches}}{\text{mm}}$

Tape and Reel.....600/reel

Unless Otherwise specified, all tolerances are  $\pm .010$   
0,25

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.

For More Information

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