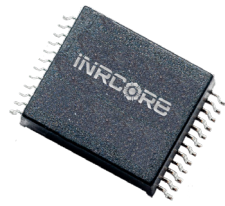


# 10/100BASE - TX DUAL PORT TRANSFORMER MODULE



Ruggedized



- Compliant with IEEE 802.3u & ANSI X3.263 standards
- 350µH OCL with 8mA bias
- Operating and Storage Temperature:
  - 100B-2002: -40°C to +85°C
  - 100B-2002X: -55°C to +125°C
- IC grade transfer-molded package withstands 235°C peak temperature profile

## 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	100 MHz	2 MHz	30 MHz	40 MHz	50 MHz	60 MHz	80 MHz	1 MHz	30 MHz	60 MHz	100 MHz	1 MHz	60 MHz	100 MHz	200 MHz
100B-2002	1.2	1.2	1.2	1.2	18	18	16	15	12	12	50	43	37	33	43	37	33	22
100B-2002X	1.2	1.2	1.2	1.2	18	18	16	15	12	12	50	43	37	33	43	37	33	22

### NOTES:

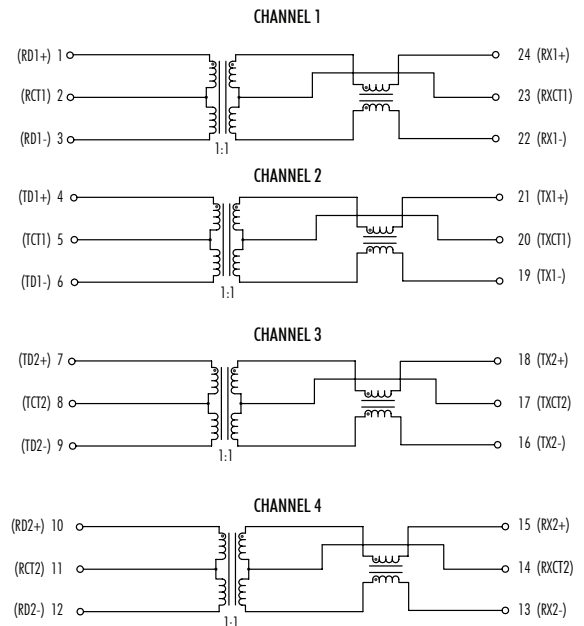
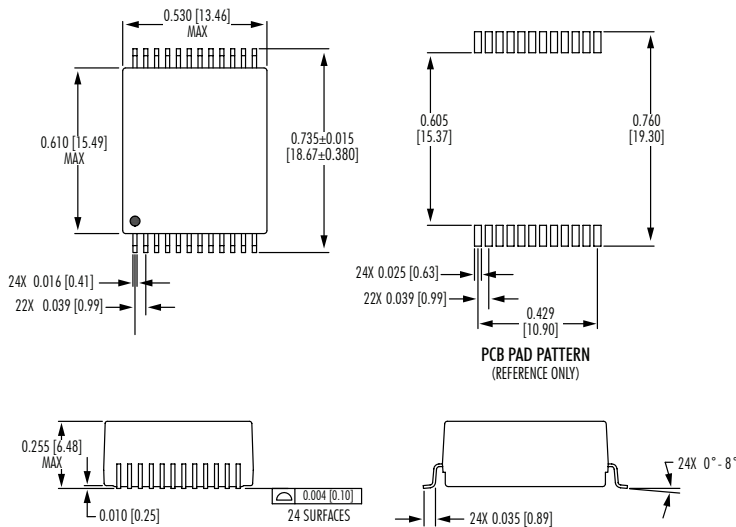
- Standard Parts have Sn63/Pb37 Lead Finish (MSL:3)
- Add suffix "NL" for RoHS compliant version; i.e. 100B-1001 becomes **100B-2002NL**. NL parts have 100% SN Lead Finish (MSL:4)
- For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. **100B-2002XNLT**

### Mechanicals

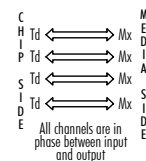
### Electrical Schematics

#### 100B-2002 / 100B-2002X

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



#### LEGEND



# 10/100BASE - TX DUAL 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



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