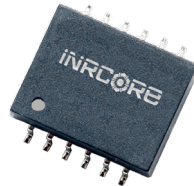


# 10/100BASE - TX SINGLE PORT TRANSFORMER MODULE

Ruggedized



**iNRCORE**  
iNRCORE FAMILY OF BRANDS

- Compliant with IEEE 802.3 standards
- 350 $\mu$ H OCL with 8mA DC bias
- Dielectric Withstanding Voltage (DWV): 1500 Vrms
- Operating Temperature: -40°C to +85°C
- Lead Finish: Sn63Pb37
- 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)				CM 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	1 MHz	30 MHz	60 MHz	80 MHz	1 MHz	30 MHz	60 MHz	100 MHz	1 MHz	30 MHz	60 MHz	100 MHz
100B-4016	1.1	1.1	1.1	1.1	1.1	18	18	14	12	10	45	43	37	35	45	45	35	30	42	35	28	28

## NOTES:

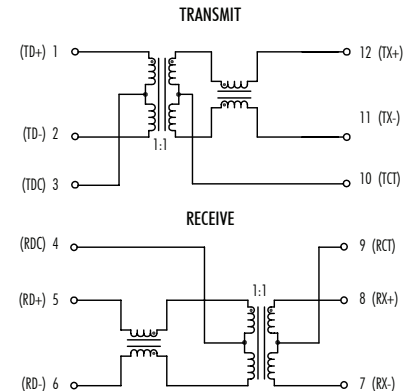
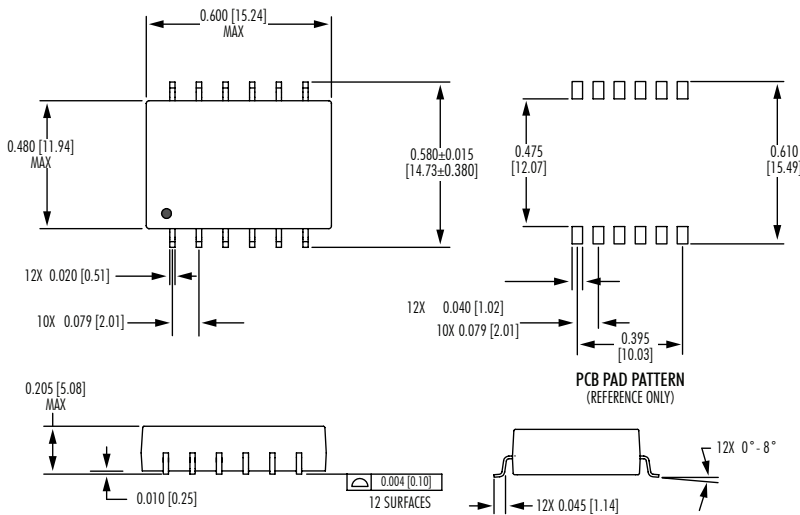
- Add suffix "NL" for RoHS compliant version; i.e. 100B-4016 becomes 100B-4016NL. NL parts have 100% SN Lead Finish (MSL:3)
- For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. 100B-4016NLT.

## Mechanicals

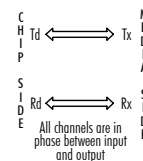
## Electrical Schematics

100B-4016

Dimensions: inch [mm]  
Tolerance (unless otherwise specified):  $\pm 0.010$  [0.25]



## LEGEND



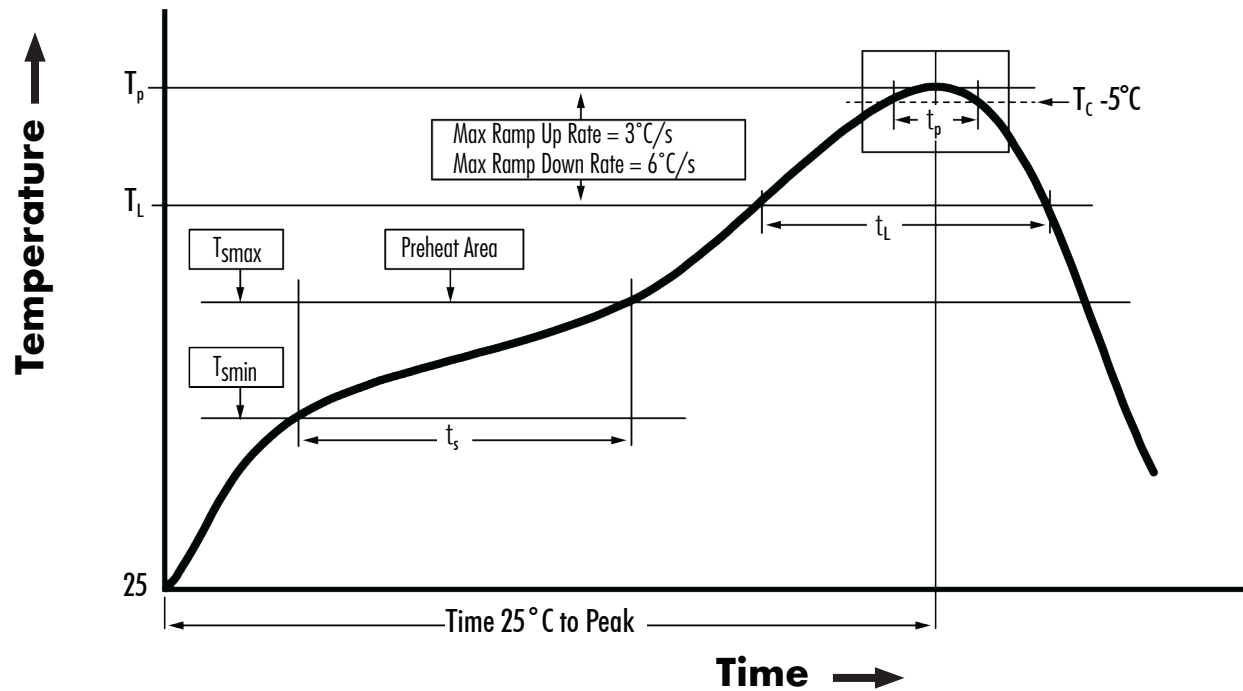
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M198.E (08AUG25)

10/100BASE - TX SINGLE PORT  
TRANSFORMER MODULE

Ruggedized

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)
Tin/Lead Profile									
100	150	183	220	60 - 120	60 - 150	20	3°C/s MAX	6°C/s MAX	360
Non-Lead Profile									
150	200	217	245	60 - 120	60 - 150	30	3°C/s MAX	6°C/s MAX	480

NOTES:

- 1. All temperatures measured on the package leads.
- 2. Maximum number of reflow cycles not to exceed 2.



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