

# 1000BASE-T SINGLE PORT TRANSFORMER MODULE

Ruggedized

- ⊙ OCL 200 $\mu$ H MIN with 8mA DC bias, at 100KHz, 100mV
- ⊙ Operating Temperature: -40 $^{\circ}$ C to +85 $^{\circ}$ C
- ⊙ Storage Temperature: -55 $^{\circ}$ C to +125 $^{\circ}$ C
- ⊙ Dielectric Withstanding Voltage (DWW): 1500Vrms
- ⊙ Terminal Finish: Sn100
- ⊙ Moisture Sensitivity Level: 3

## Electrical Specifications @ 25 $^{\circ}$ C

Part Number	Insertion Loss (dB MAX)				Return Loss (dB MIN)				Crosstalk (dB MIN)				Common Mode Rejection (dB MIN)		
	0.10 MHz	30 MHz	60 MHz	100 MHz	40 MHz	60 MHz	80 MHz	100 MHz	1 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz
1000B-5065NL	1.2	1.2	1.2	1.2	16	12	10	8	50	43	37	33	31	25	20

### NOTES:

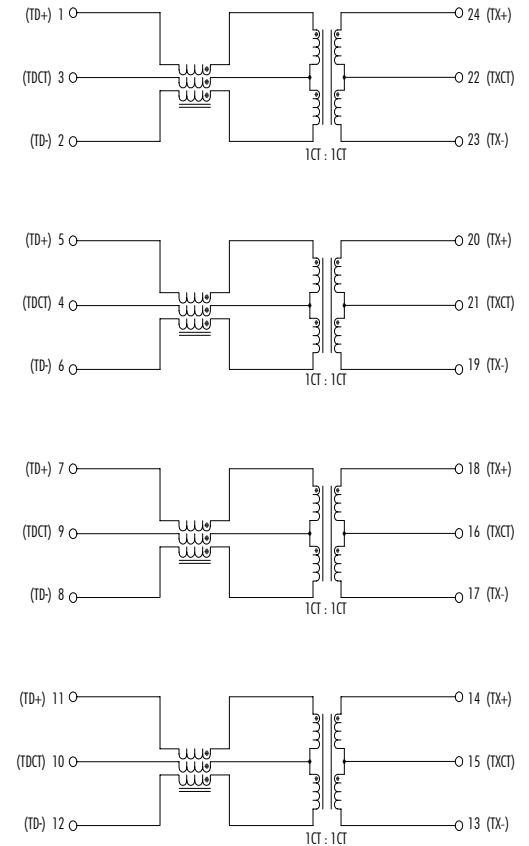
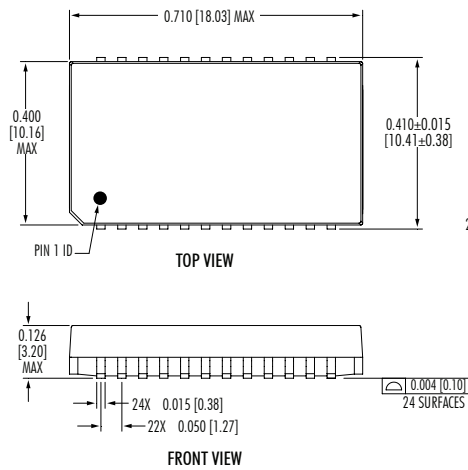
- For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. 1000B-5065NLT.

### Mechanicals

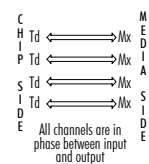
### Electrical Schematics

1000B-5065NL

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



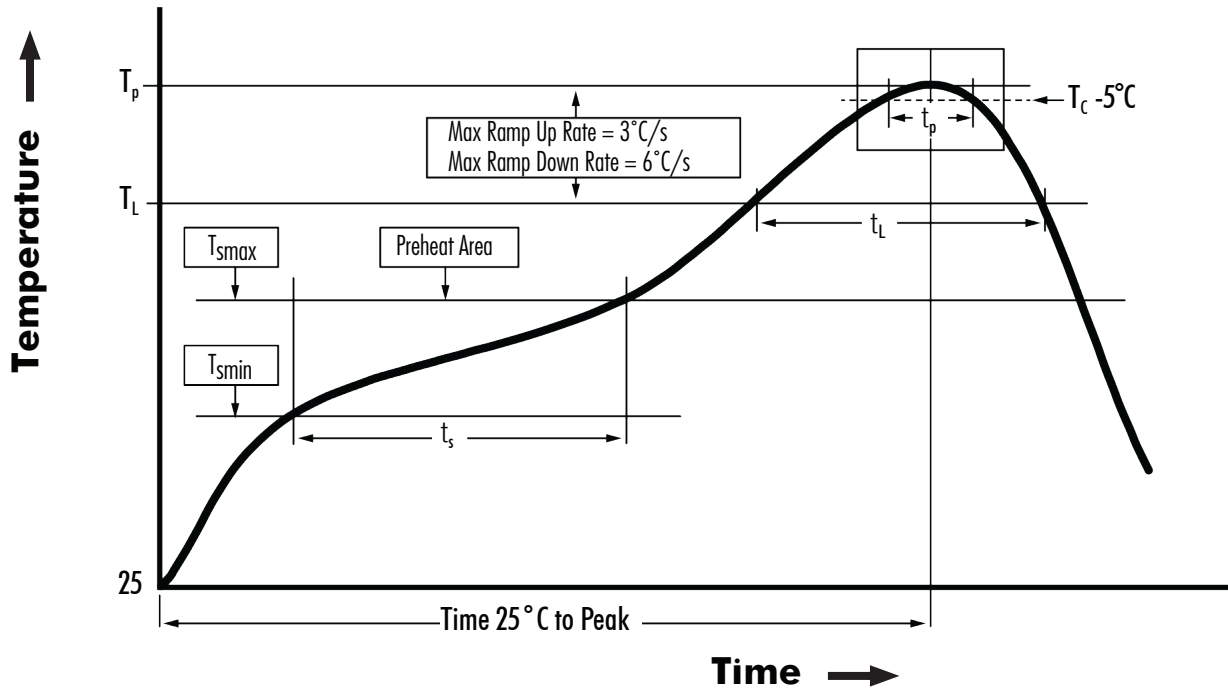
#### LEGEND



# 1000BASE-T 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)
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.
3. Reflow cycle applies only to surface mount parts.



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)

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, 2023. iNRCORE, LLC. All rights reserved.

M519 (9JUN23)