

# 1000BASE - T SINGLE PORT TRANSFORMER MODULES

Ruggedized

- ⊗ Compliant with IEEE 802.3 standard
- ⊗ 350μH OCL with 8mA DC bias at extended temperatures
- ⊗ Operating Temperature:
  - ⊗ 1000B-5033: -40°C to +85°C
  - ⊗ 1000B-5033X: -55°C to +125°C
- ⊗ Storage Temperature: -55°C to +125°C
- ⊗ Dielectric Withstanding Voltage (DWV): 1500 Vrms
- ⊗ Moisture Sensitivity Level: 3
- ⊗ Lead Finish: Sn-Pb

## Electrical Specifications @ 25°C

Part Number	Insertion Loss (dB MAX)				Return Loss (dB MIN)					Cross Talk (dB MIN)			Common Mode Rejection Ratio (dB MIN)			DM to CM Rejection Ratio (dB MIN)		
	0.10 MHz	30 MHz	60 MHz	100 MHz	5 MHz	30 MHz	60 MHz	80 MHz	100 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz
1000B-5033	1.2	1.2	1.2	1.2	18	18	14	12	10	43	37	31	33	30	25	43	37	33
1000B-5033X	1.2	1.2	1.2	1.2	18	18	12	10	8	43	37	31	33	30	25	43	37	33

### NOTES:

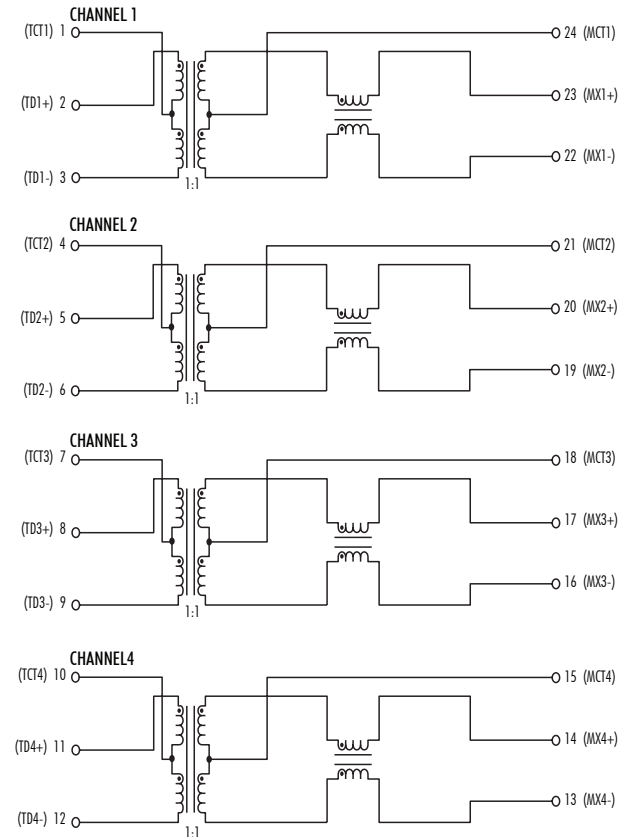
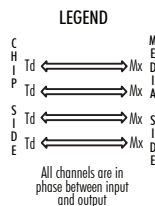
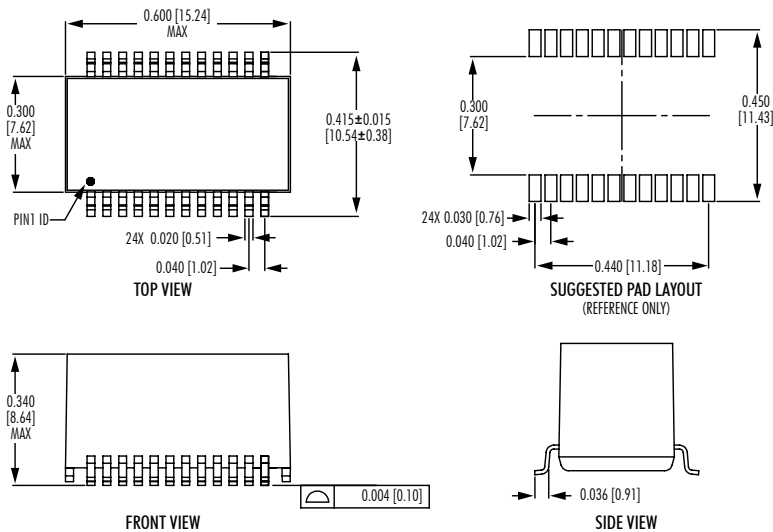
- Add suffix "NL" for RoHS compliant version; i.e. 1000B-5033 becomes **1000B-5033NL**. NL parts have 100% SN Lead Finish.
- For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. **1000B-5033NLT**.

### Mechanicals

### Electrical Schematics

#### 1000B-5033(X)

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



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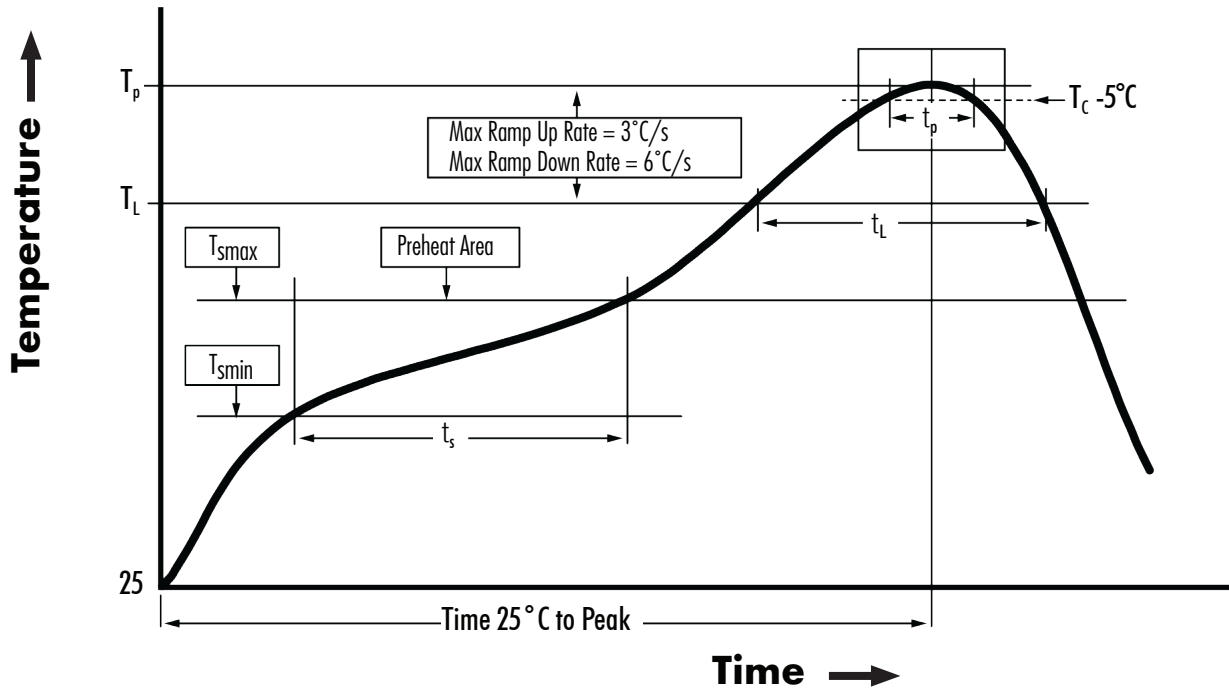
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M433.A (10FEB25)

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## 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)
<b>Tin/Lead Profile</b>									
100	150	183	220	60 - 120	60 - 150	20	3°C/s MAX	6°C/s MAX	360
<b>Non-Lead Profile</b>									
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.

