

1000BASE-T SINGLE PORT TRANSFORMER MODULE

Ruggedized

- ⊗ Compliant with IEEE 802.3af requirements for PoE
- ⊗ 350μH OCL with 8mA DC bias at extended temperatures
- ⊗ Current Rating: 350mA MAX per pair
- ⊗ Dielectric Withstanding Voltage (DWV): 1500 Vrms
- ⊗ Operating Temperature: -40°C to +85°C
- ⊗ Storage Temperature: -55°C to +125°C
- ⊗ Lead Finish: Sn63/Pb37
- ⊗ Moisture Sensitivity Level: 3

Electrical Specifications @ 25°C

Part Number	Insertion Loss (dB MAX)					Return Loss (dB MIN)					Crosstalk (dB MIN)			CM to CM Rejection (dB MIN)		
	1 MHz	30 MHz	60 MHz	80 MHz	100 MHz	1 MHz	40 MHz	60 MHz	80 MHz	100 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz
1000B-5068	1.1	1.1	1.1	1.1	1.1	18	18	14	12	10	43	37	31	40	35	30

NOTES:

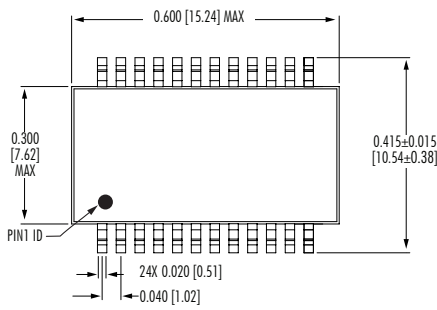
1. Add suffix "NL" for RoHS compliant version; i.e. 1000B-5068 becomes 1000B-5068NL. NL parts have 100% SN Lead Finish.
2. For Tape and Reel Packaging, add "T" suffix at the end of the part number; i.e. 1000B-5068T.

Mechanicals

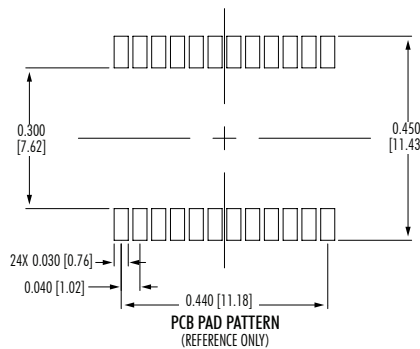
Electrical Schematics

1000B-5068

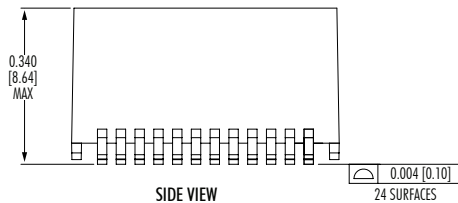
Dimensions: inch [mm]
Tolerance (unless otherwise specified): ±0.010 [0.25]



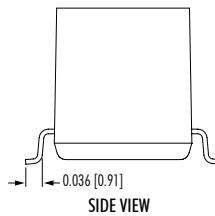
TOP VIEW



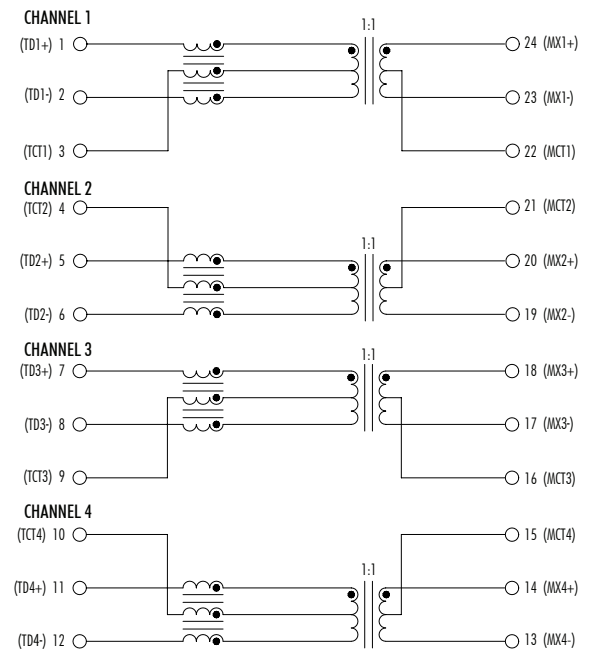
PCB PAD PATTERN
(REFERENCE ONLY)



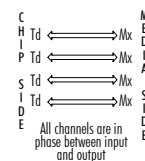
SIDE VIEW



SIDE VIEW



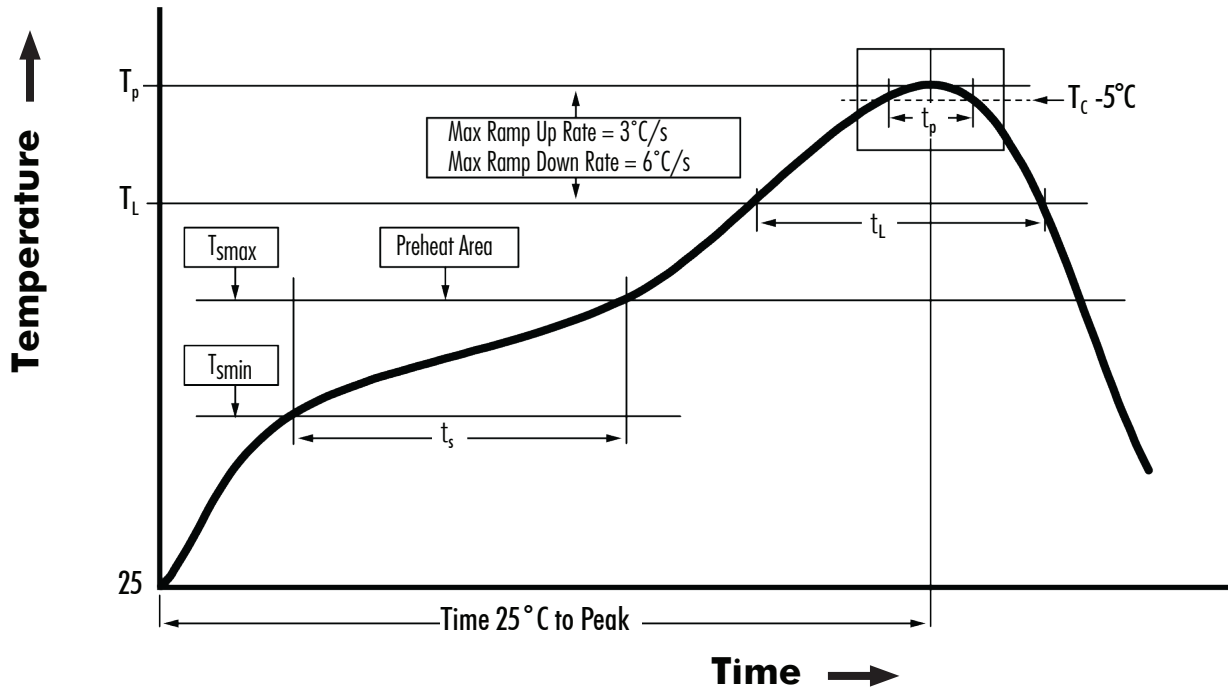
LEGEND



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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)
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.
3. Reflow cycle applies only to surface mount parts.



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