

10/100BASE - TX TRANSFORMER MODULE



Ruggedized



- ⊗ Compliant with IEEE 802.3 standards
- ⊗ 350μH OCL with 8mA DC bias
- ⊗ Operating and Storage Temperature:
 - ⊗ 100B-4009: -40°C to +85°C
 - ⊗ 100B-4009X: -55°C to +125°C
- ⊗ Dielectric Withstanding Voltage (DWV): 1500 Vrms
- ⊗ Epoxy Encapsulated package withstands 235°C peak temperature profile
- ⊗ 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 (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	200 MHz
100B-4009	1.4	1.4	1.4	1.4	18	18	14.4	13.1	12	12	50	42	37	32	37	25	25
100B-4009X	1.4	1.4	1.4	1.4	18	18	14.4	13.1	12	12	50	42	37	32	37	25	25

NOTES:

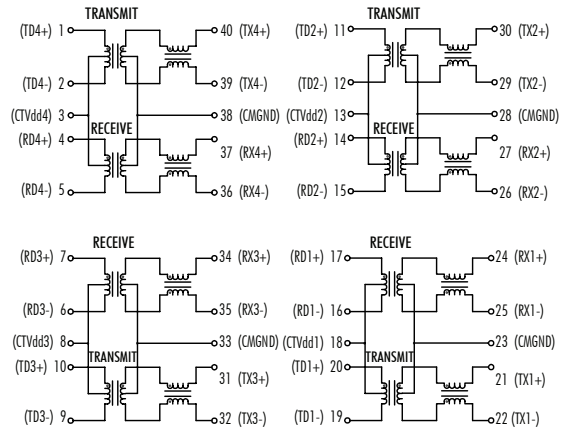
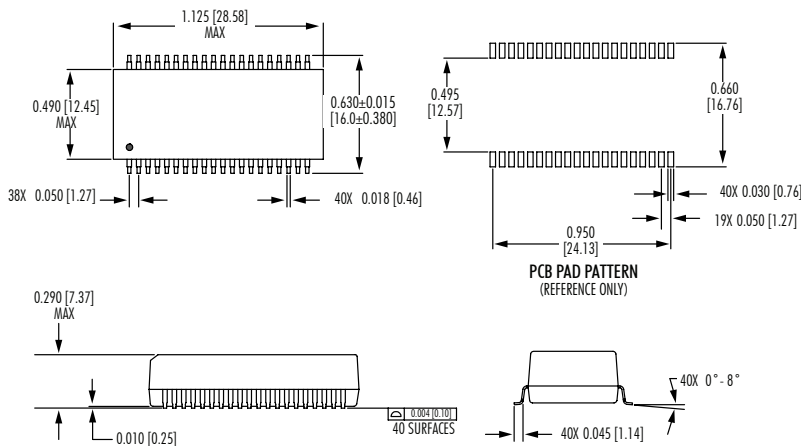
1. Add suffix "NL" for RoHS compliant version; i.e. 100B-4009 becomes 100B-4009NL. NL parts have 100% SN Lead Finish (MSL:4).
2. For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. 100B-4009XNLT.

Mechanicals

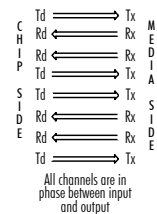
Electrical Schematics

100B-4009 & 100B-4009X

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

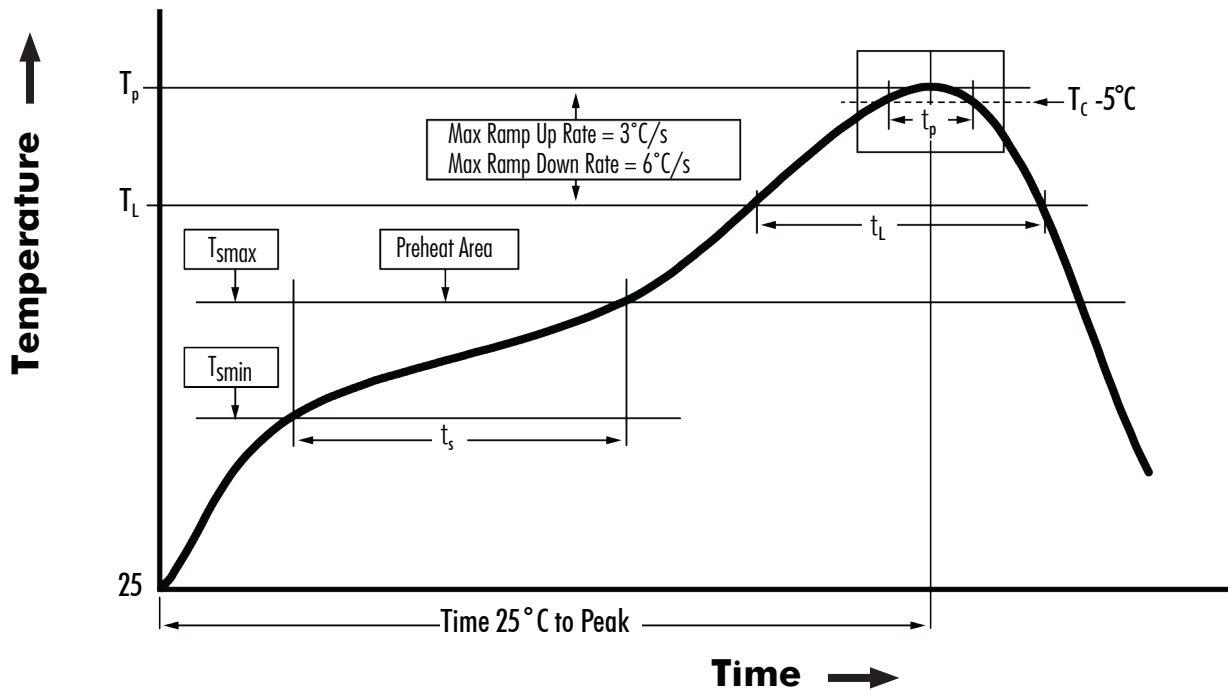


LEGEND



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 number of reflow cycles not to exceed 2.



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