

10/100BASE - TX SINGLE PORT TRANSFORMER MODULE



Ruggedized



- Compliant with IEEE 802.3u & ANSI X3.263 standards
- 350µH OCL with 8mA bias at extended temperatures
- Operating and storage temperature:
100B-2002F: -40°C to +85°C
100B-2002FX: -55°C to +125°C
- Moisture Sensitivity Level: 3
- Epoxy encapsulated package withstands 235°C peak temperature
- Terminal Finish: matte tin allow solder over nickel layer
- Lead Finish: Sn63 Pb37 finish for non-RoHS products
- Sn100 Finish: for RoHS products using NL suffix

Electrical Specifications @ 25°C

Part Number	Insertion Loss (dB MAX)				Return Loss (dB MIN)						Crosstalk (dB MIN)				DM to CM Rejection Ratio (dB MIN)			DWW (Vrms)
	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	100 MHz	
100B-2002F	1.2	1.2	1.2	1.2	18	18	16	15	12	12	50	43	37	33	43	37	33	1500
100B-2002FX	1.2	1.2	1.2	1.2	18	18	16	15	12	12	50	43	37	33	43	37	33	1500

NOTES:

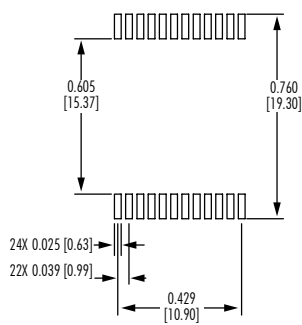
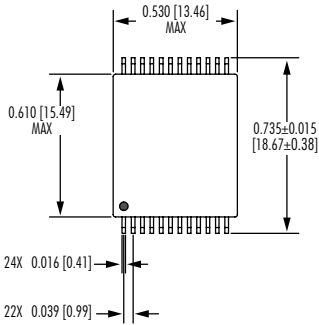
- Add suffix "NL" for RoHS (Sn100 Lead Finish) compliant version; i.e. 100B-2002F becomes 100B-2002FNL
- For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. 100B-2002FXLT
- IC Grade transfer-molded package withstands 235°C peak temperature profile; RoHS version withstands 245°C.

Mechanicals

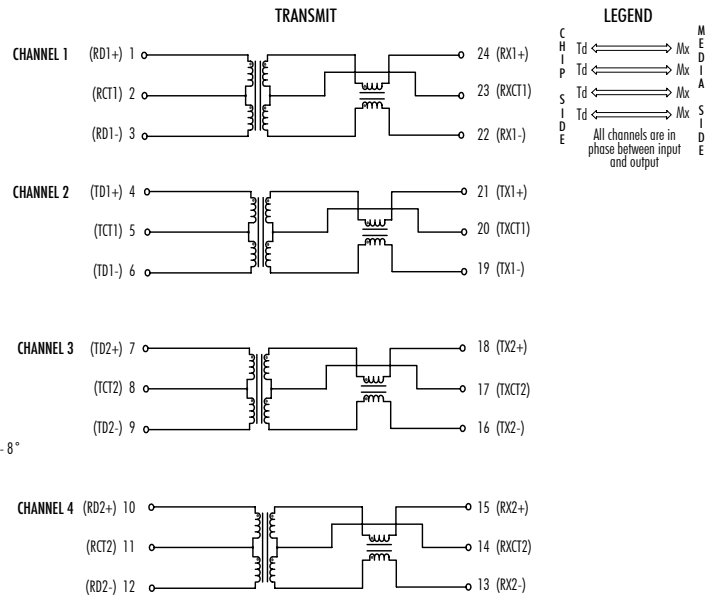
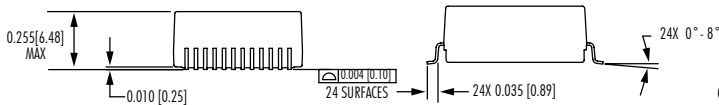
Electrical Schematics

100B-2002FX

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



PCB PAD PATTERN (REFERENCE ONLY)

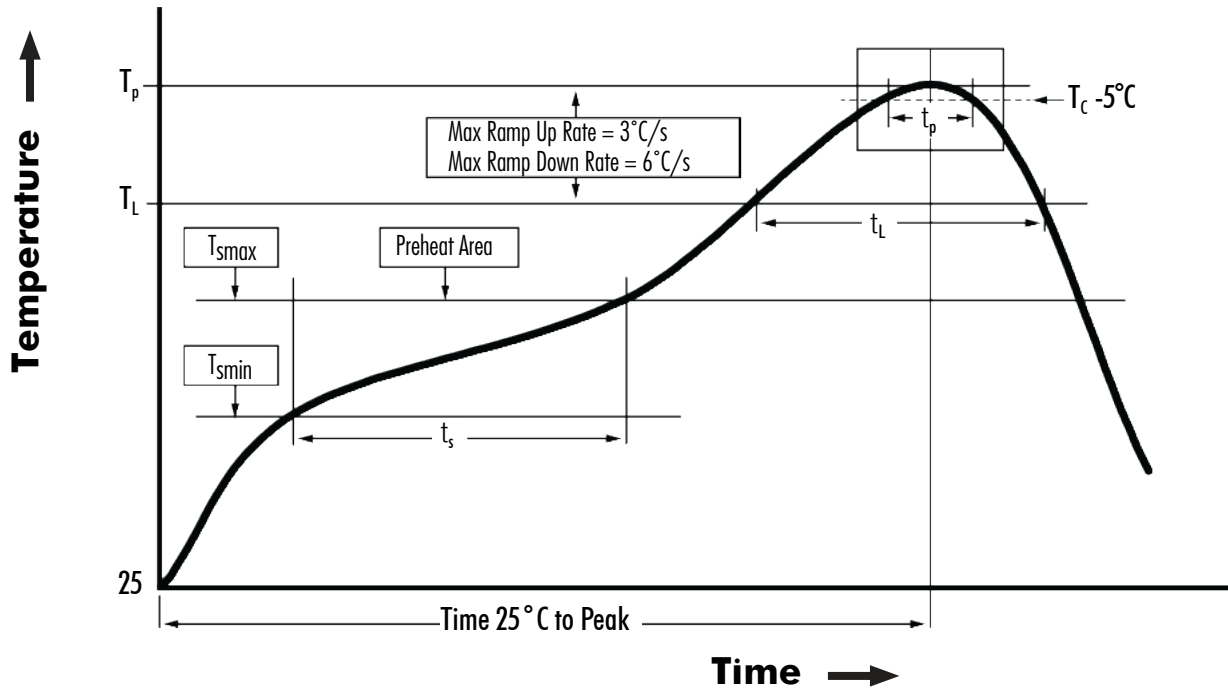


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Tin/Lead Recommended Reflow Profile (Based on J-STD-020D)



$T_{S_{MIN}}$ (°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 times of reflow cycle: 2



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