# 10/100BASE - TX SINGLE PORT TRANSFORMER MODULE

Ruggedized



- Compliant with IEEE 802.3u & ANSI X3.263 standards
- 350µH OCL with 8mA D.C.
- Operating Temperature: -55°C to +125°C
- IC grade transfer-molded package withstands 235°C peak temperature profile
- Moisture Sensitivity Level: 3

Electrical Specifications @ 25°C																		
	Insertion Loss (dB MAX)					Return Loss (dB MIN)					Crosstalk (dB MIN)				DM to CM Rejection Ratio (dB MIN)			
Part Number	0.10 MHz	30 MHz	60 MHz	80 MHz	100 MHz	2 MHz	30 MHz	50 MHz	60 MHz	80 MHz	16 MHz	30 MHz	60 MHz	80 MHz	0.10 MHz	30 MHz	60 MHz	100 MHz
100B-1018X	1.2	1.2	1.2	1.2	1.2	18	18	14	12	10	48	44	40	38	45	40	33	33

### NOTES:

- 1. Standard Parts have Sn63/Pb37 Lead Finish (MSL:3)
- 2. Add suffix "NL" for RoHS compliant version; i.e. 100B-1018X becomes 100B-1018XNL. NL parts have 100% SN Lead Finish (MSL:4)
- 3. For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. 100B-1018XNLT

#### **Electrical Schematics** Mechanicals Dimensions: inch [mm] Tolerance (unless otherwise specified): ±0.010 [0.25] 100B-1018X LEGEND TRANSMIT (TD+) 1 O -0 12 (TX+) 0.610 [15.49] 0.480 0.480 [12.19] MAX 0.580±0.015 [14.73] (TD-) 2 d o 11 (TX-) **→** 10 (TCT) (TDC) 3 O All channels are in phase between input and output 12X 0.040 [1.02] 888 RECEIVE 10X 0.079 [2.00] (RDC) 4 c -0 9 (RCT) 12X 0.018 [0.48] 0.395 [10.03] 1:1 10X 0.079 [2.00] (RD+) 5 c 08 (RX+) PCB PAD PATTERN m 0.180 [4.57] o 7 (RX-) ⊤ 12X 0°-8° (RD-) 6 c MAX 1-0.006 [0.15] - 12X 0.035 [0.89] 12 SURFACES

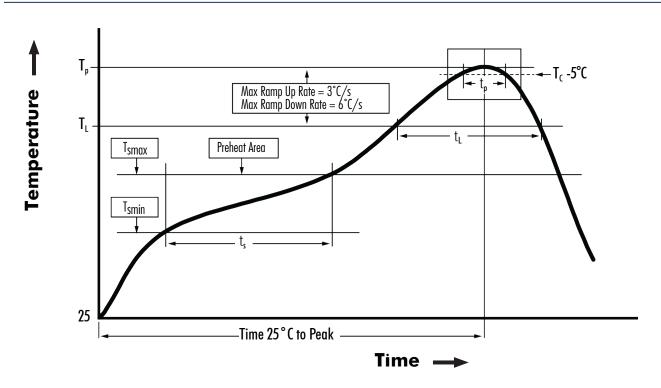


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## Tin/Lead Recommended Reflow Profile (Based on J-STD-020D)



T <sub>smin</sub> (°C)	T <sub>smax</sub> (°C)	T <sub>ւ</sub> (°C)	T <sub>P</sub> (°C MAX)	† <sub>s</sub> (s)	† <sub>L</sub> (s)	t <sub>p</sub> (s MAX)	Ramp-up rate (T <sub>L</sub> to T <sub>P</sub> )	Ramp-down rate (T <sub>P</sub> to T <sub>L</sub> )	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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