

10/100BASE-T SINGLE PORT TRANSFORMER MODULES

Industrial grade



- Compliant with IEEE 802.3 standards
- 350pH OCL with 8mA DC bias at 100KHz 100mV
- Lead finish: Pure tin
- Moisture Sensitivity Level: 1

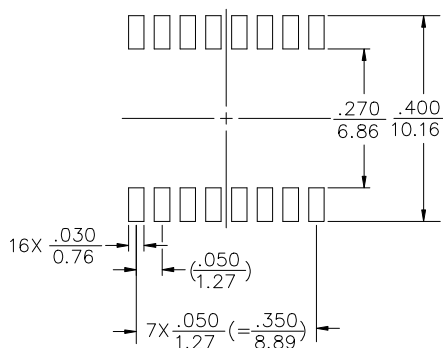
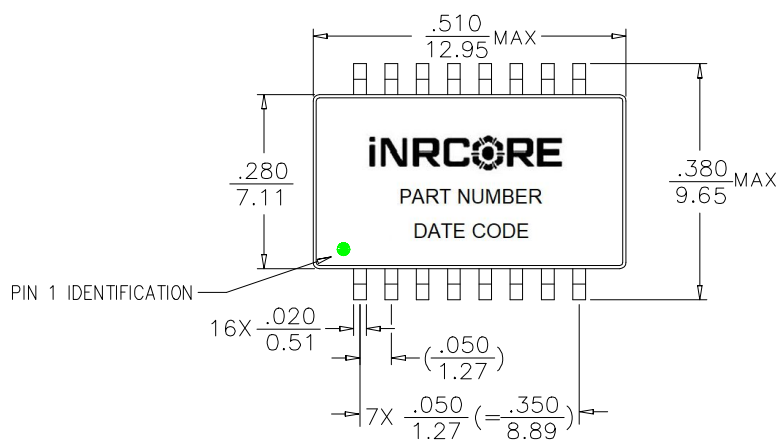
Electrical Specifications @ 25 °C – Operating Temperature – 40 °C to +85 °C

Part Number	Insertion Loss (dB MAX)	Return Loss (dB MIN)					Crosstalk (dB MIN)				Differential to Common Mode Rejection (dB MIN)			Dielectric Withstanding Voltage @60s (Vrms MIN)
	0.1-100 MHz	5 MHz	30 MHz	50 MHz	60 MHz	80 MHz	1 MHz	30 MHz	60 MHz	80 MHz	30 MHz	60 MHz	100 MHz	
R1003NL	-1.0	-18	-16	-12	-11	-10	-62	-45	-40	-35	-42	-37	-32	1500

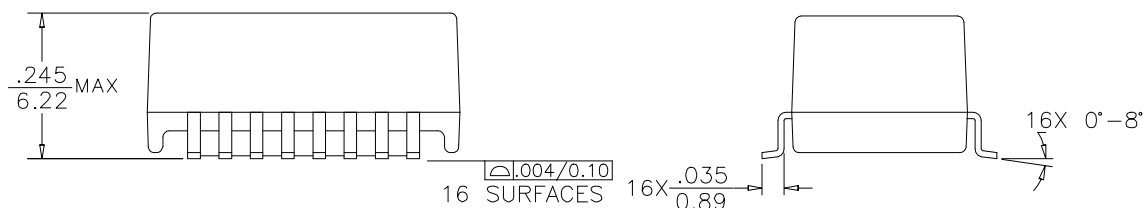
Notes: For Tape & Reel Packaging, add "T" suffix at the end of the part number; i.e. **R1003NLT**.

Mechanical

R1003NL



SUGGESTED PCB LAYOUT



Dimensions: $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified, all tolerances are: $\pm \frac{.010}{0.25}$



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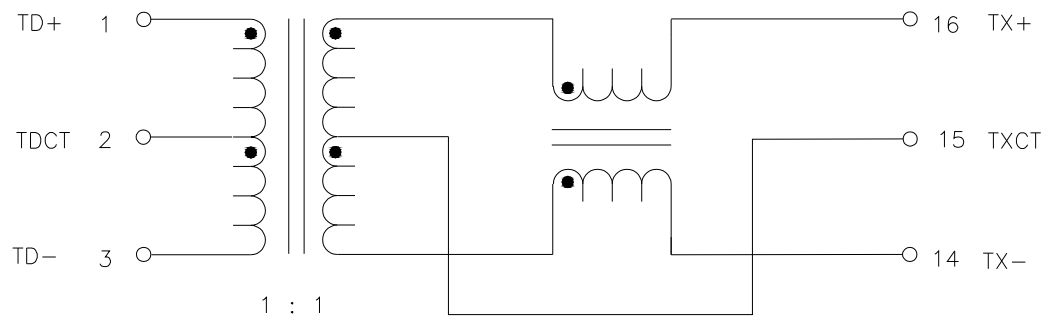
Industrial grade



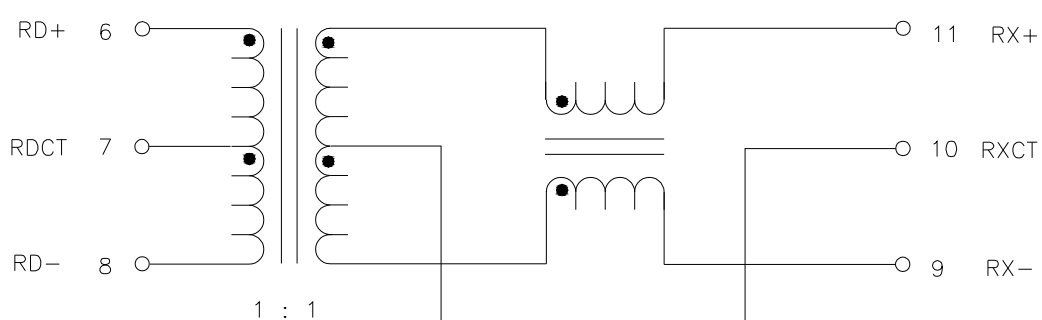
Electrical Schematic

R1003NL

TRANSMIT



RECEIVE



SCHEMATIC

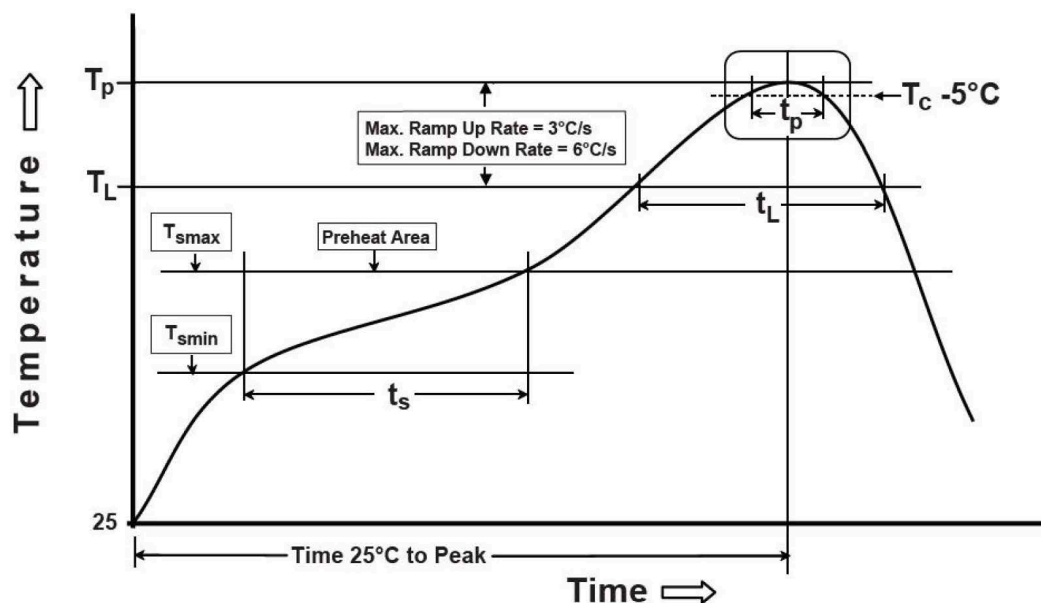


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Non-Lead Recommended Reflow Profile (Based on J-STD-020D)



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)
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 times of reflow cycle: 2.

For More Information

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