1000BASE-T TRANSFORMER MODULE

Industrial Grade

iNRCORE

- ◎ Compliant with IEEE 802.3 standards
- ◎ 350µH OCL with 8mA D.C.bias at 100KHz, 100mV
- ◎ Operating Temperature: -40°C to +85°C
- ◎ Storage Temperature: -55°C to +125°C
- ◎ Dielectrict Withstanding Voltage (DWV): 1500 Vrms
- ◎ Lead Finish: Sn100
- ◎ Moisture Sensitivity Level: 1
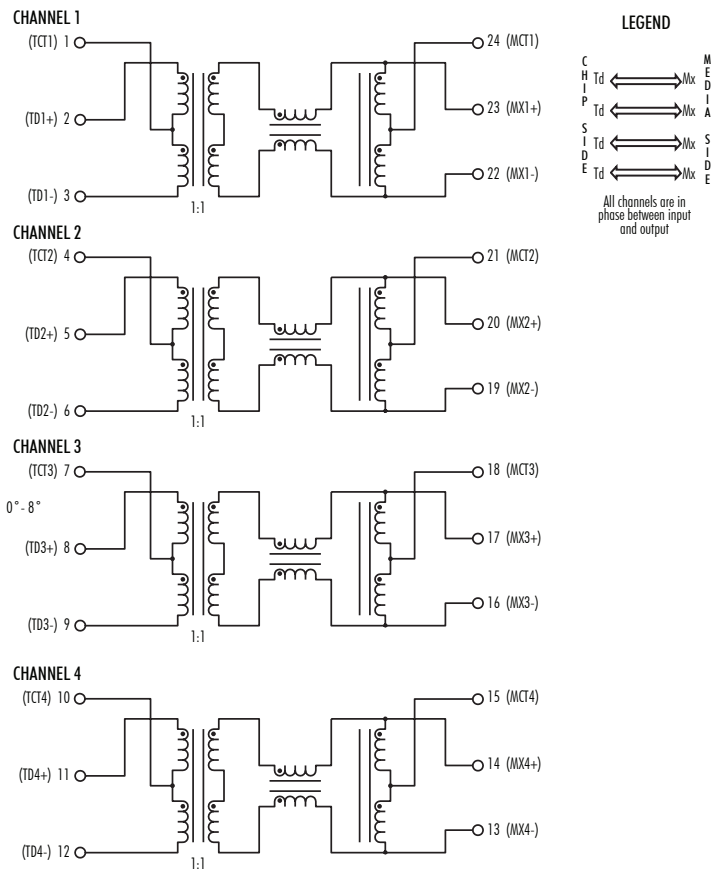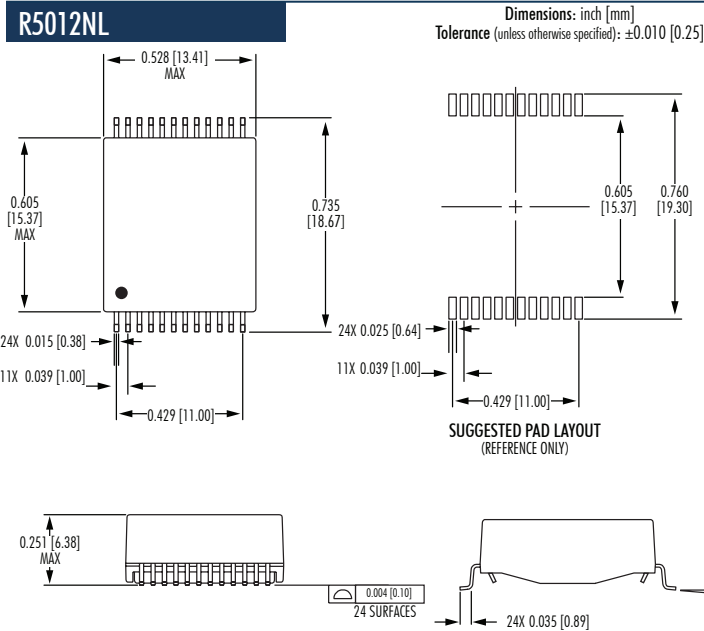
Electrical Specifications @ 25°C

Part Number	Insertion Loss (dB MAX)				Return Loss (dB MIN)					Crosstalk (dB MIN)			DM to CM Rejection Ratio (dB MIN)		
	0.10 MHz	30 MHz	60 MHz	100 MHz	30 MHz	50 MHz	60 MHz	80 MHz	100 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz
R5012NL	1.2	1.2	1.2	1.2	18	13	12	10	8	43	37	33	43	37	30

NOTES:

1. For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. **R5012NLT**

Mechanicals

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

R5012NL

SUGGESTED PAD LAYOUT
(REFERENCE ONLY)

24 SURFACES

Electrical Schematics

CHANNEL 1

CHANNEL 2

CHANNEL 3

CHANNEL 4

LEGEND

All channels are in phase between input and output

Non-Lead Recommended Reflow Profile (Based on J-STD-020D)
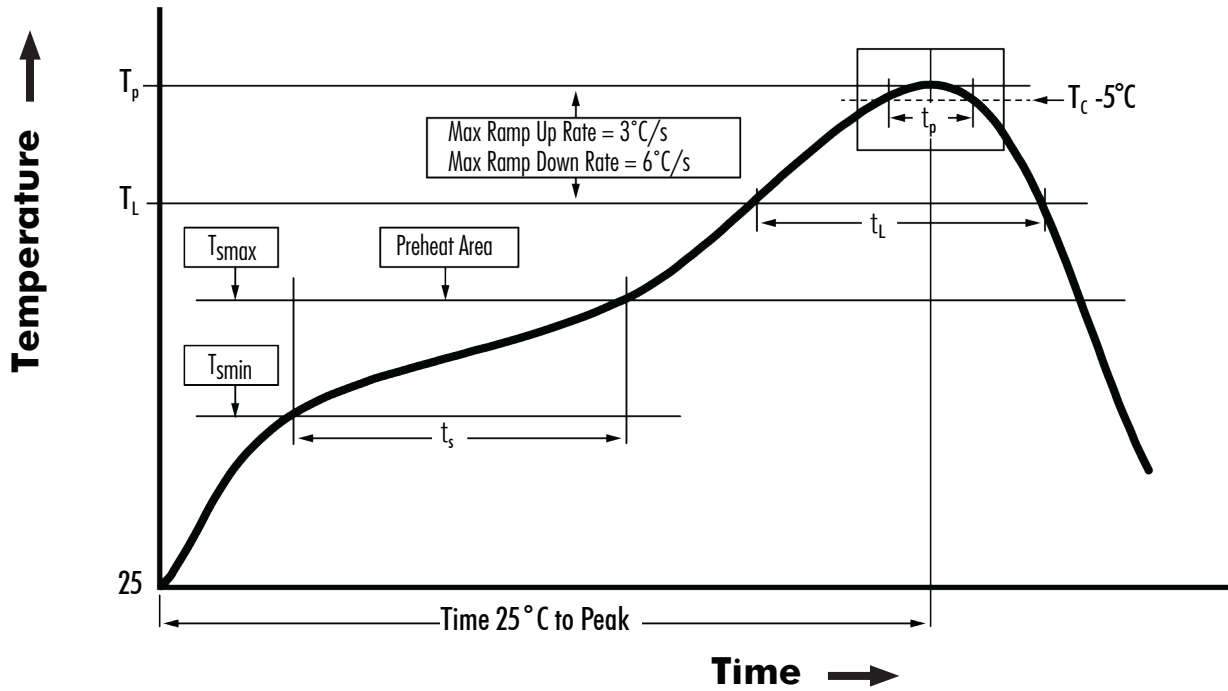
T_{SMIN} (°C)	T_{SMAX} (°C)	T_L (°C)	T_P (°C MAX)	t_S (s)	t_L (s)	t_P (s MAX)	Ramp-up rate (T_L to T_P)	Ramp-down rate (T_P to T_L)	Time 25°C to peak temperature (s MAX)
150	200	217	245	60 - 120	60 - 150	30	3°C/s MAX	6°C/s MAX	480

NOTES:
1. All temperatures measured on the package leads.
2. Maximum number of reflow cycles not to exceed 2.

N008.A (07/22)

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