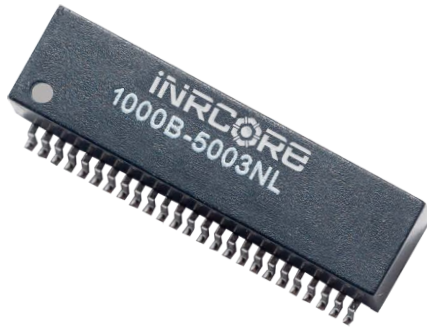


10/100/1000BASE-T SINGLE & DUAL PORT TRANSFORMER MODULES

Ruggedized



- Compliant with IEEE 802.3ab for 1000Base-T
- 350pH OCL with 8mA bias at extended temperatures
- Storage temperature: -55°C to +125°C
- Operating temperature:
 - 1000B-5001/5002/5003: -40°C to +85°C
 - 1000B-5001X/5002X/5003X: -55°C to +125°C
- IC grade transfer-molded package withstands 235°C peak temperature profile
- Moisture Sensitivity Level: 3

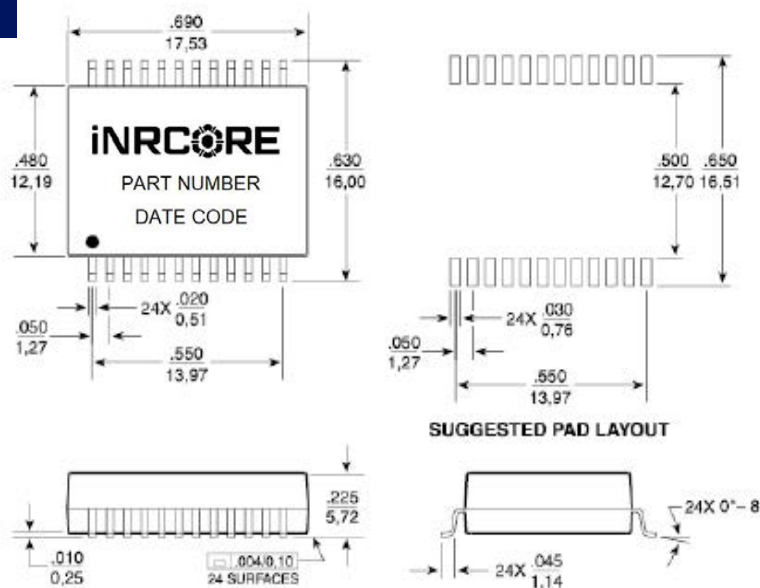
Electrical Specifications @ 25°C

Part Number*	Insertion Loss (dB Min)	Return Loss (dB Max)				Crosstalk (dB Max)			CM to CM Rejection Ratio (dB Max)			DM to CM Rejection Ratio (dB Max)			HiPot (Vrms MIN)
	0.1-100 Mhz	30 Mhz	60 Mhz	80 Mhz	100 Mhz	30 Mhz	60 Mhz	100 Mhz	30 Mhz	60 Mhz	100 Mhz	30 Mhz	60 Mhz	100 Mhz	@60HZ (1MIN)
1000B-5001	-1.20	-18	-12	-10	-10	-43	-37	-33	-40	-35	-30	-43	-37	-33	1500
1000B-5001X	-1.40	-18	-12	-10	-8	-43	-37	-33	-40	-35	-30	-43	-37	-33	1500
1000B-5002	-1.20	-18	-14	-12	-10	-43	-37	-33	-40	-35	-30	-43	-37	-33	1500
1000B-5002X	-1.20	-18	-14	-12	-10	-43	-37	-33	-40	-35	-30	-43	-37	-33	1500
1000B-5003	-1.20	-18	-14	-11	-9	-43	-37	-33	-40	-35	-30	-43	-37	-33	1500
1000B-5003X	-1.20	-18	-14	-11	-9	-43	-37	-33	-40	-35	-30	-43	-37	-33	1500

- Notes *: 1. Add suffix NL for RoHS compliant part; i.e. 1000B-5001F becomes **1000B-5001NL**
 2. For Tape and Reel Packaging, add "T" suffix at the end of the part number; i.e. **1000B-5001XT**.
 3. Add suffix X for extended temperature version (i.e. 1000B-5009F) becomes **1000B-5001X**.
 4. iNRCORE will support any requests for our legacy part numbers that include 'F' in the suffix; i.e. **1000B-5001F** or **1000B-5003FNLT**

Mechanical

1000B-5001



Dimensions: Inches
mm
Unless otherwise specified, all tolerances are: $\pm .010$
0,25



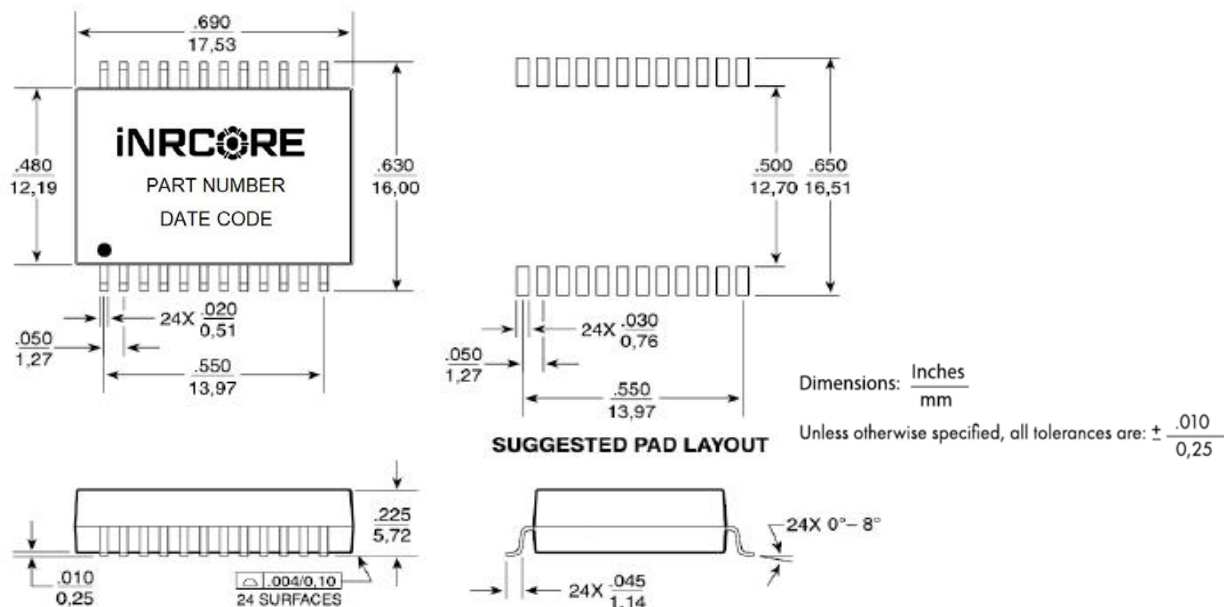
10/100/1000BASE-T SINGLE & DUAL PORT TRANSFORMER MODULES

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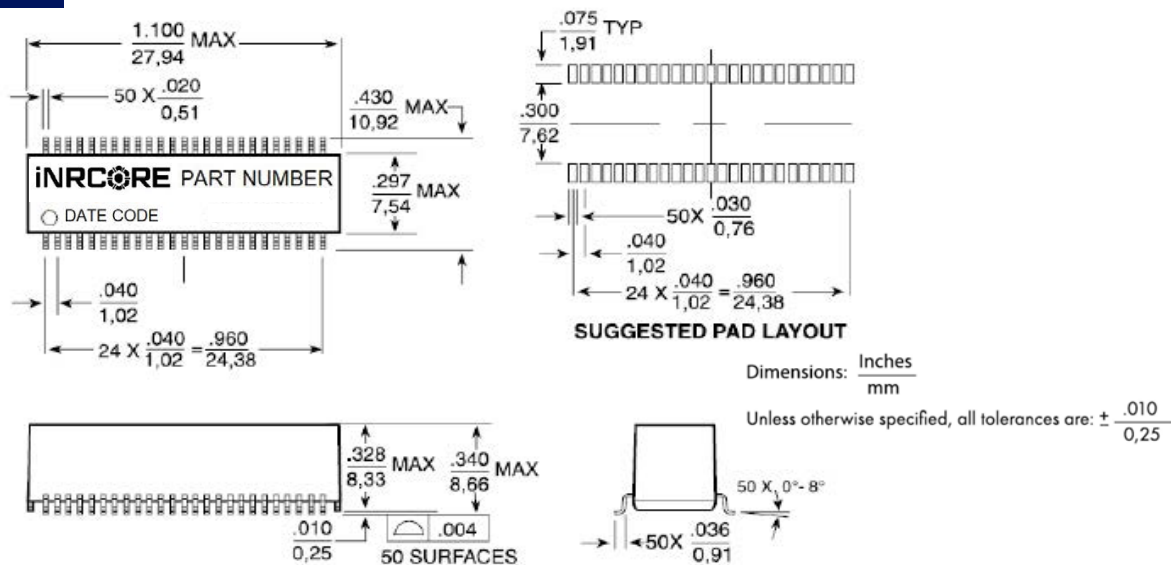
Mechanical

1000B-5002



Mechanical

1000B-5003



10/100/1000BASE-T SINGLE & DUAL PORT TRANSFORMER MODULES

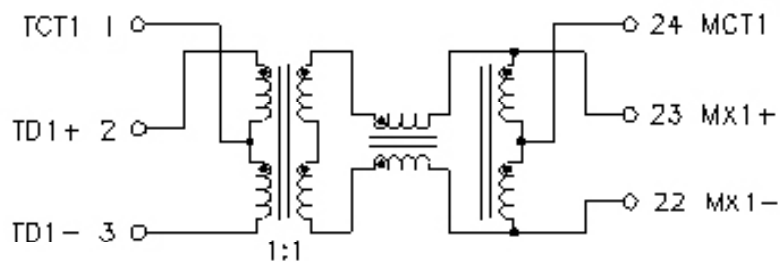
Ruggedized



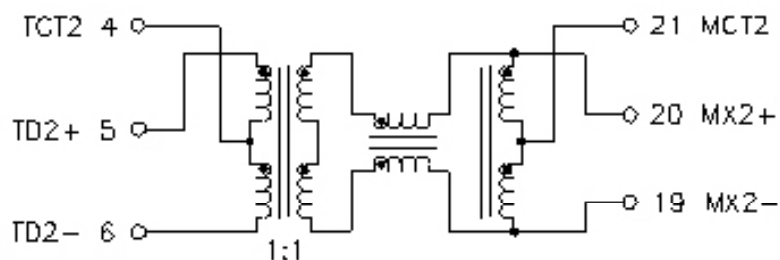
Electrical Schematics

1000B-5001

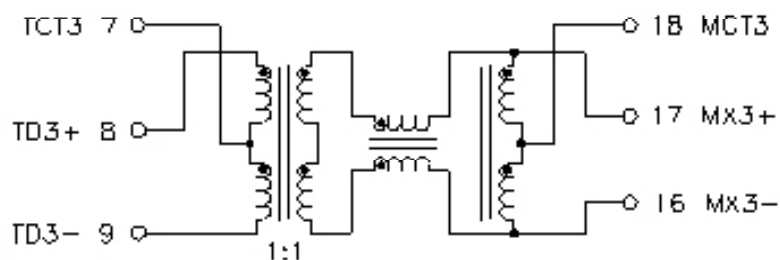
CHANNEL 1



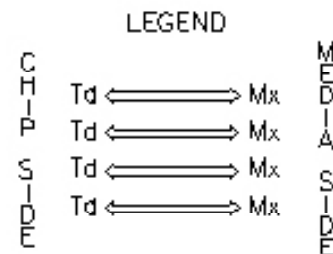
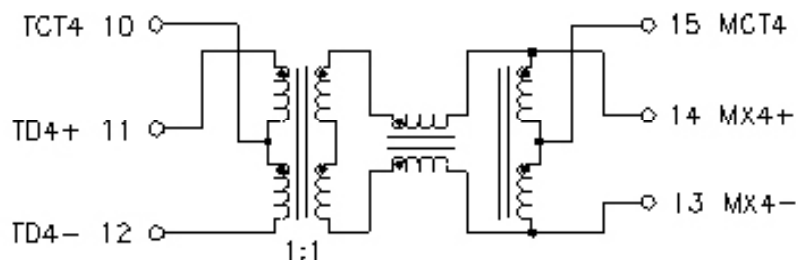
CHANNEL 2



CHANNEL 3



CHANNEL 4



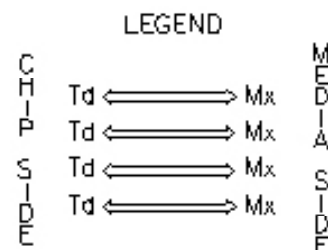
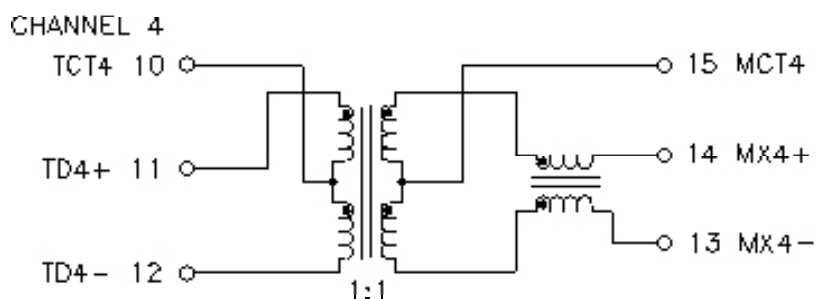
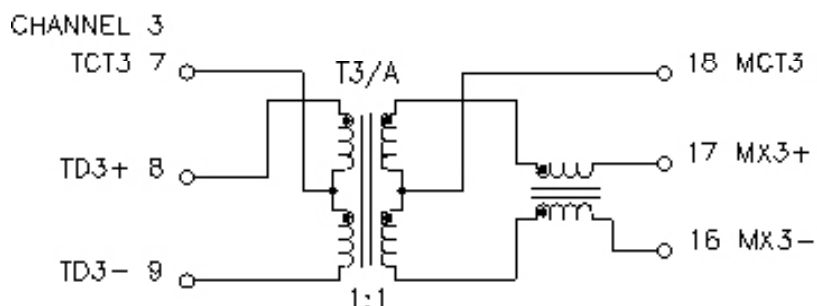
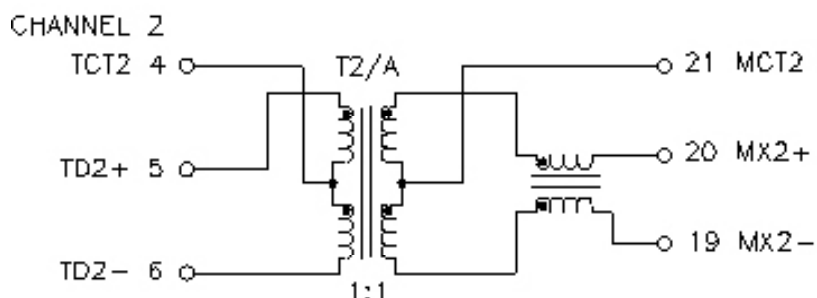
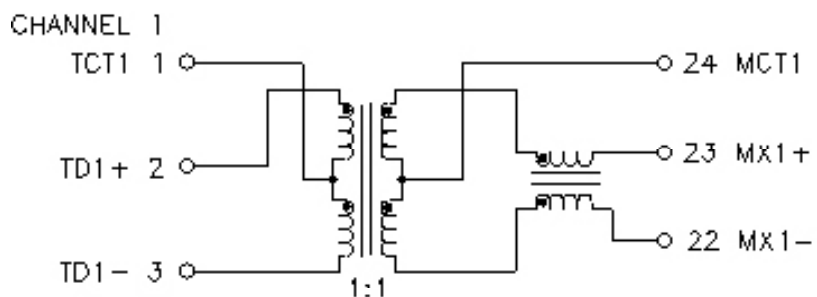
10/100/1000BASE-T SINGLE & DUAL PORT TRANSFORMER MODULES

Ruggedized



Electrical Schematics

1000B-5002



ALL CHANNELS ARE
IN PHASE BETWEEN
INPUT AND OUTPUT



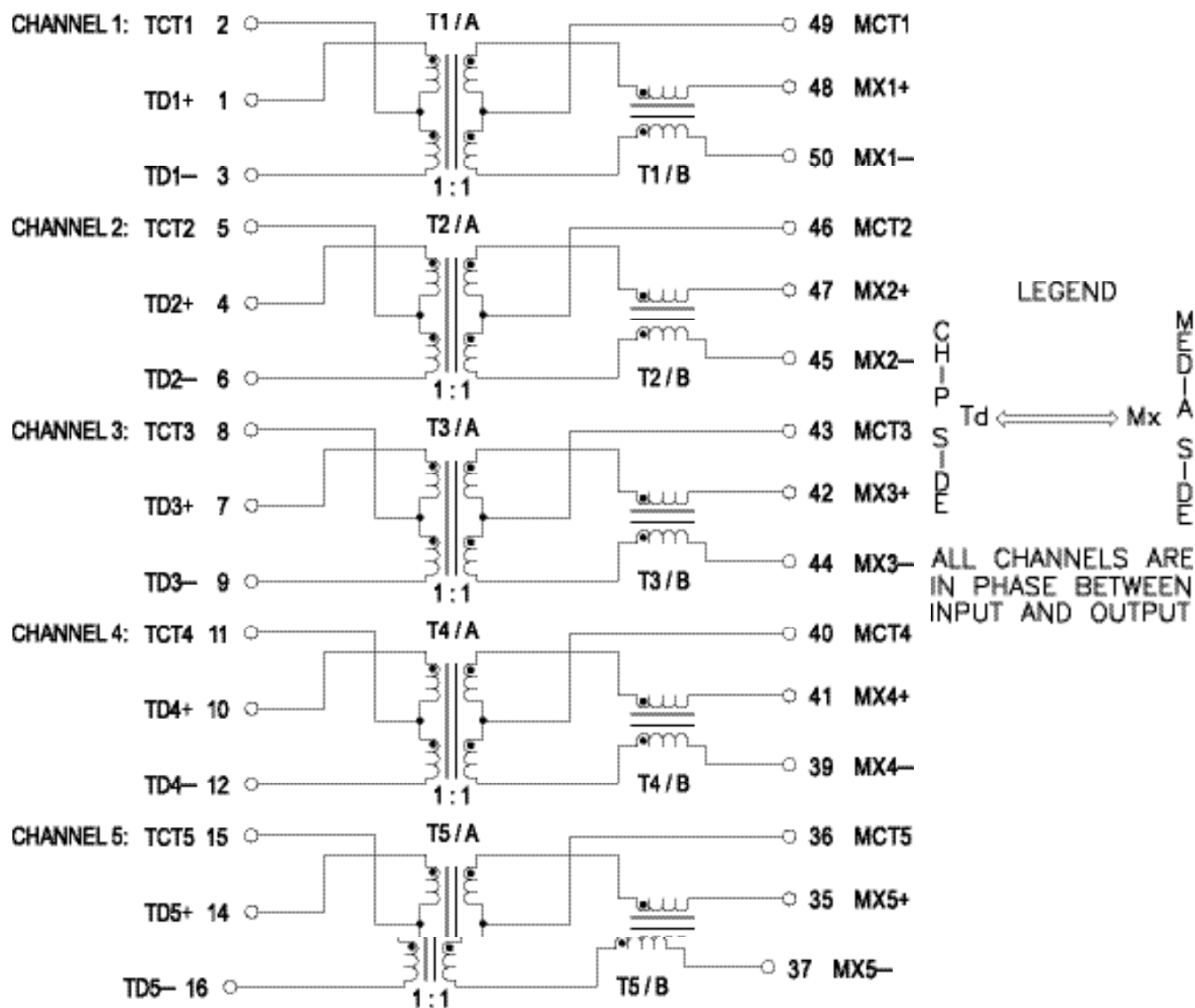
10/100/1000BASE-T SINGLE & DUAL PORT TRANSFORMER MODULES

Ruggedized



Electrical Schematics

1000B-5003



Continued on next page.



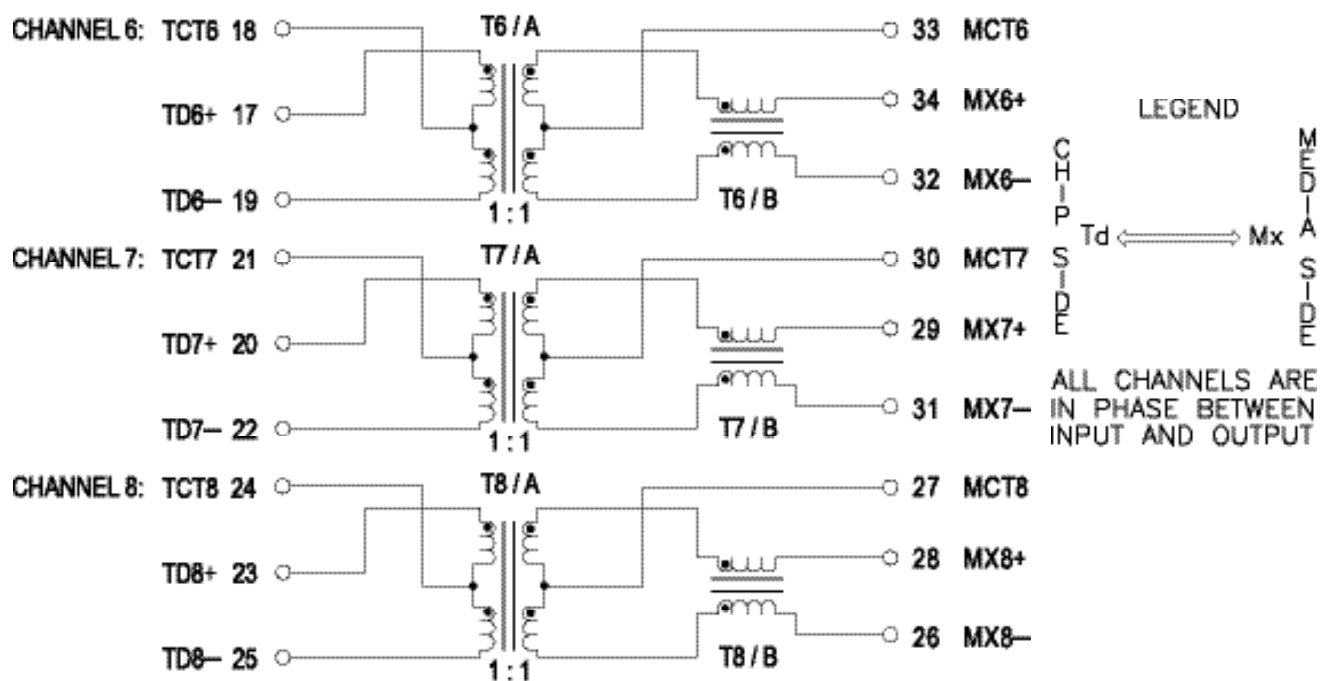
10/100/1000BASE-T SINGLE & DUAL PORT TRANSFORMER MODULES

Ruggedized



Electrical Schematics

1000B-5003 (cont.)

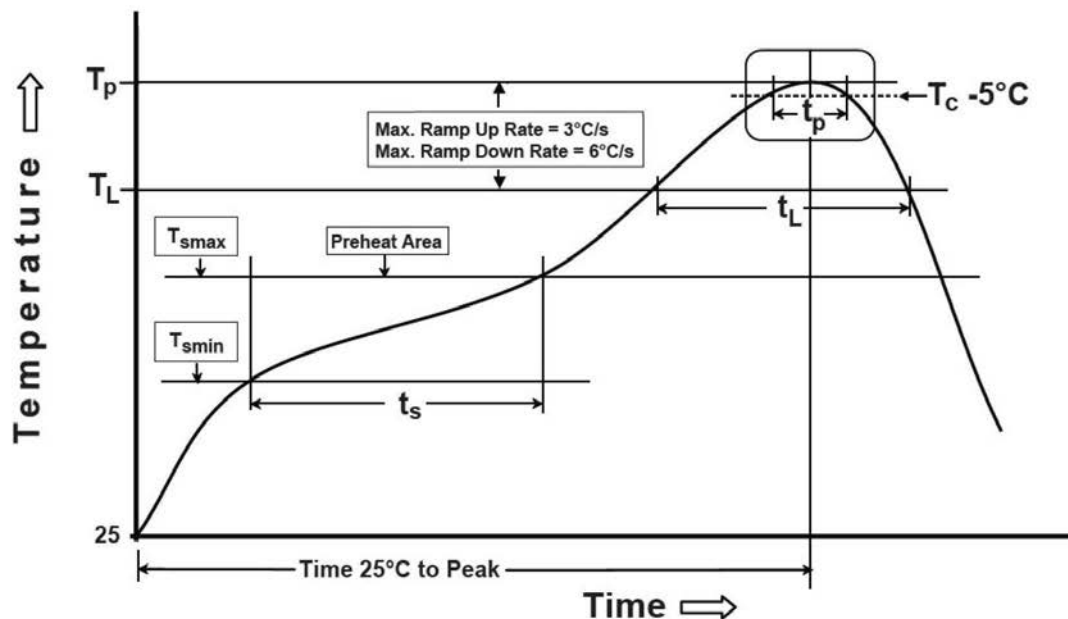


10/100/1000BASE-T SINGLE & DUAL PORT TRANSFORMER MODULES

Ruggedized



Tin/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)
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.

For More Information

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<http://www.inrcore.com>

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