

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

Ruggedized



- R** Compliant with IEEE 802.ab for 1000Base-T
- R** 350QH OCL with 8mA bias at extended temperatures
- R** Two Operating and Storage Temperature Versions Available:
 - Standard: -40°C to +85°C
 - Extended: -55°C to +125°C
- R** 245°C peak reflow temperature for RoHS versions (MSL 4)
 - Lead finish: Sn63/Pb37 (RoHS compliant version available with 100% pure tin)
- R** Moisture Sensitivity Level: 3

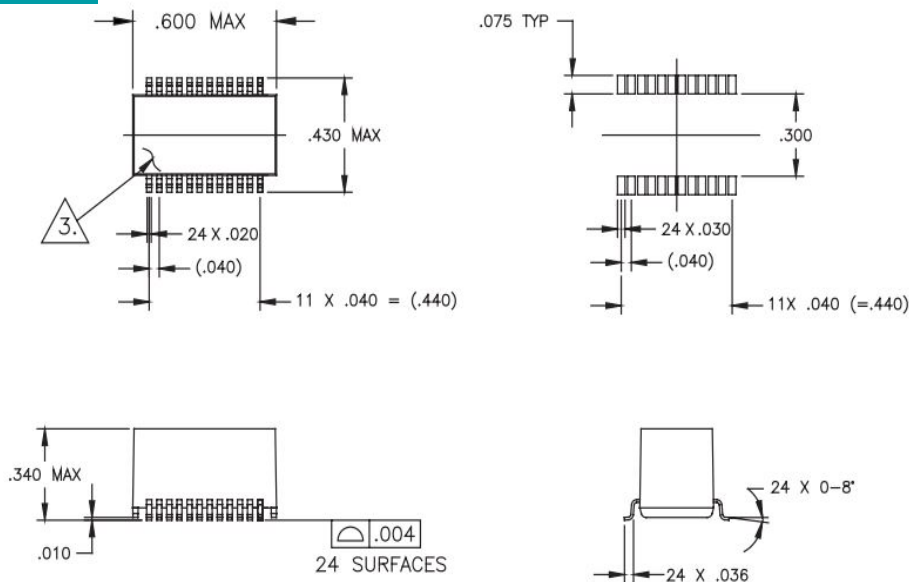
Electrical Specifications @ 25°C — Operating Temperature -40°C to +85°C

Part Number ^{1,2}	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)
		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	
1000B-5009F	-1.2	-18	-12	-12	-10	-43	-37	-31	-30	-25	-18	-40	-35	-30	1500
1000B-5012F	-1	-18	-12	-12	-10	-43	-37	-33	-43	-37	-33	-43	-37	-33	1500
1000B-5014F	-1.4	-16	-12	-12	-10	-43	-37	-33	-45	-40	-35	-43	-37	-33	1500
1000B-5016F*	-1.2	-18	-12	-12	-10	-43	-37	-31	-30	-23	-17	-40	-35	-30	1500

Note: 1. Add suffix X for extended temperature version; i.e. 1000B-5009F becomes 1000B-5009FX. (*1000B-5016F does not offer X-Version)
 2. Add suffix NL for RoHS compliant part; i.e. 1000B-5012F becomes 1000B-5012FNL.
 3. For Tape & Reel Packaging, add "T" suffix at the end of the part number; i.e. 1000B-5014FT

Mechanicals

1000B-5009F/X



Weight 0.75 grams
 Tape and Reel 250/reel
 Tube 15/tube

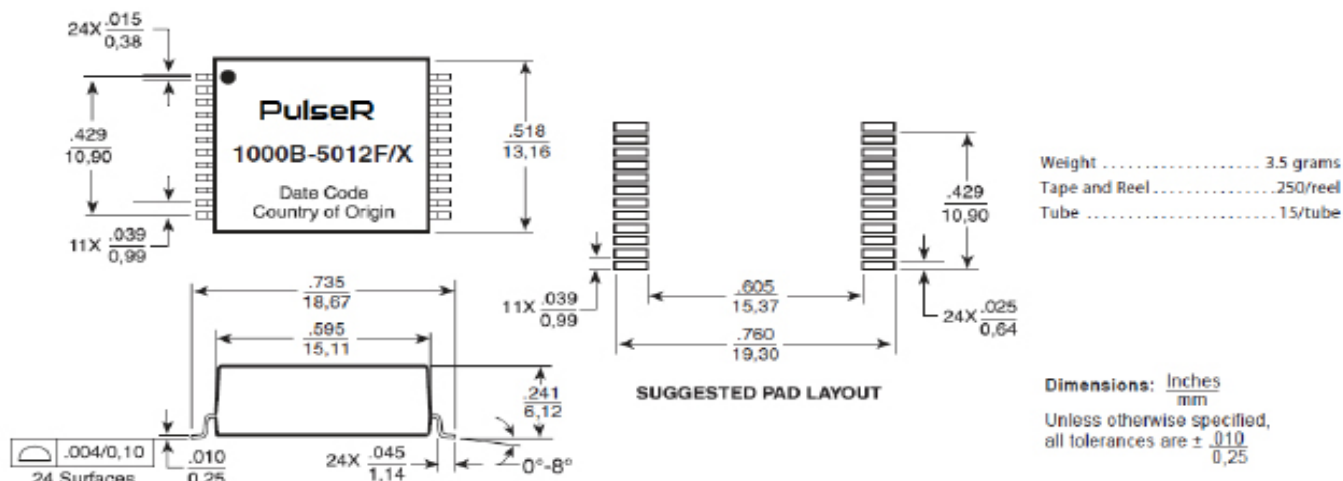
Dimensions: Inches
 mm
 Unless otherwise specified,
 all tolerances are ± .010
 0,25

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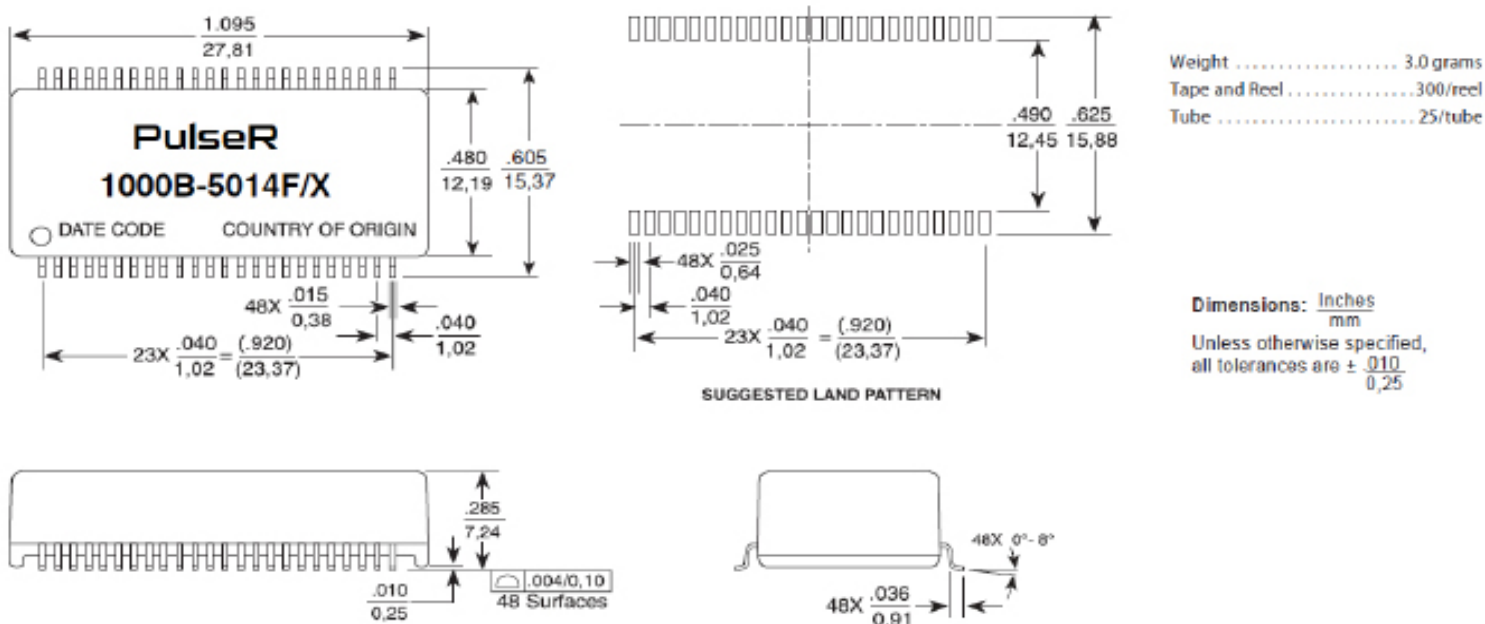
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1000B-5012/X



1000B-5014F/X

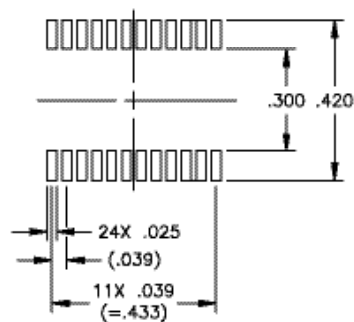
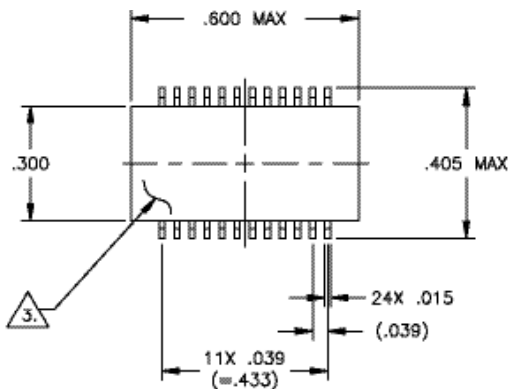


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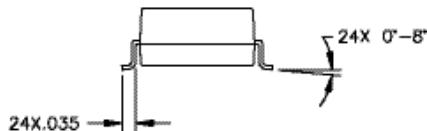
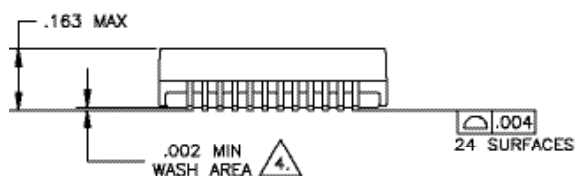
1000B-5016F



SUGGESTED LAND PATTERN

Weight 0.75 grams
 Tape and Reel700/reel
 Tube 30/tube

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



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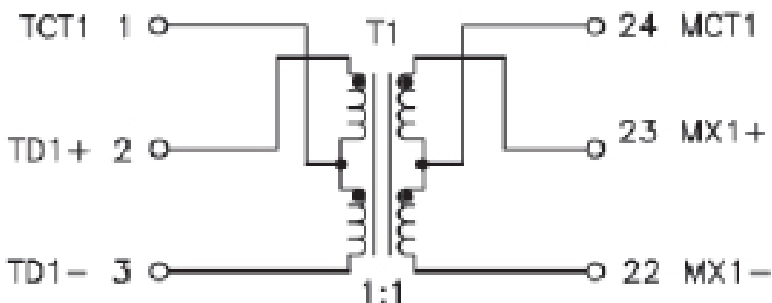
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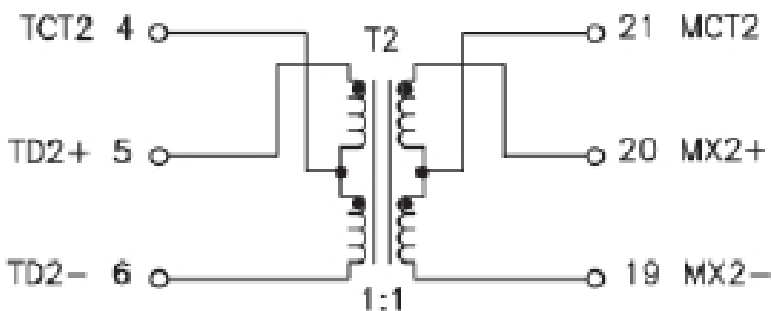
Electrical Schematics

1000B-5009F/X

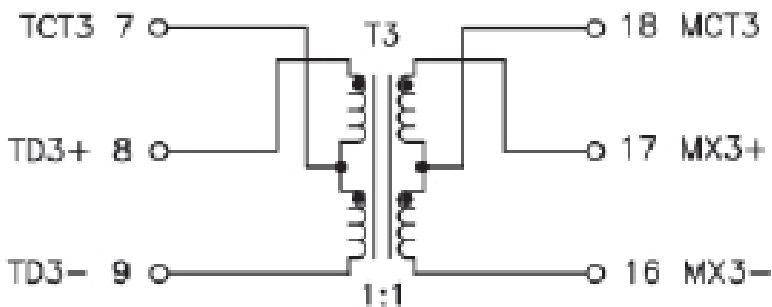
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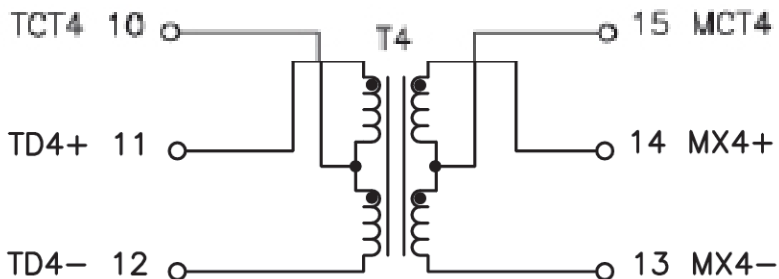
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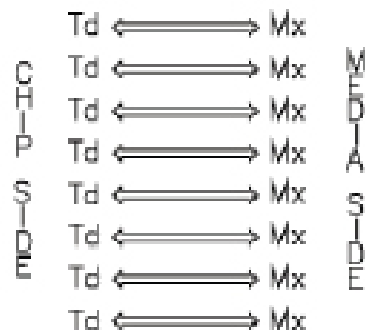
CHANNEL 3



CHANNEL 4



LEGEND



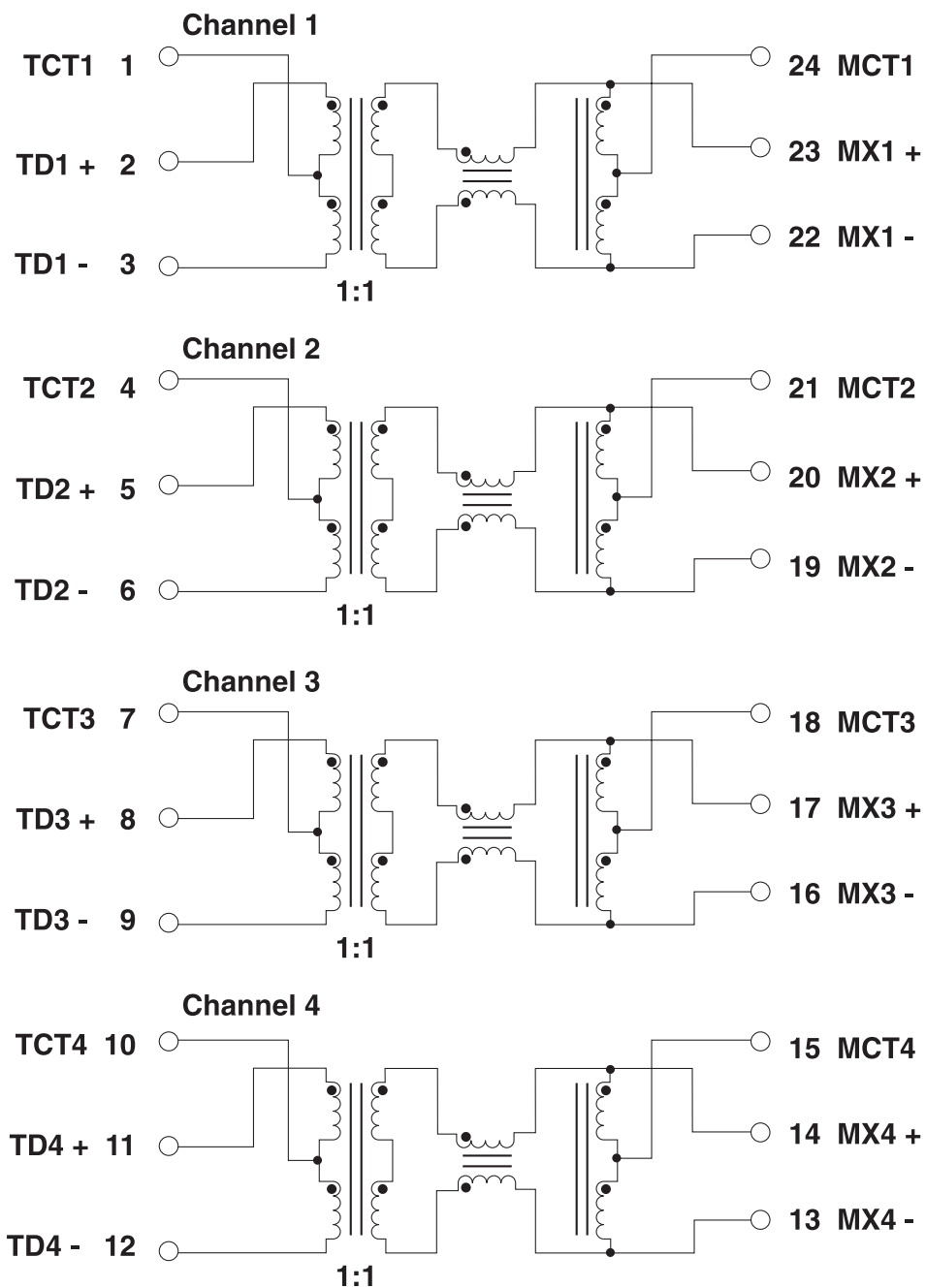
ALL CHANNELS ARE IN PHASE BETWEEN INPUT AND OUTPUT

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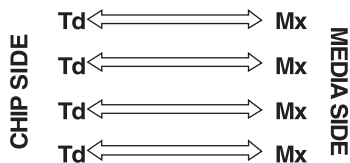
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1000B-5012F/X



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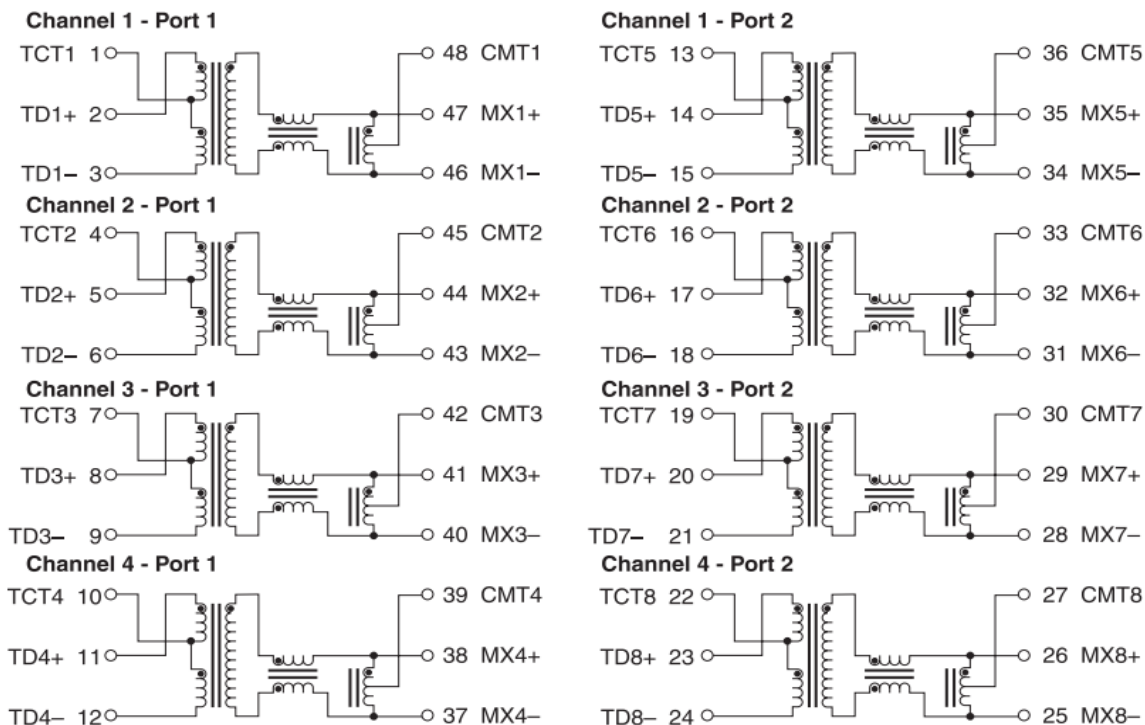


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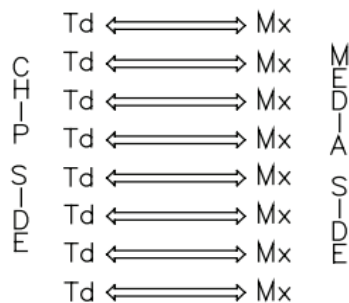
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1000B-5014F/X



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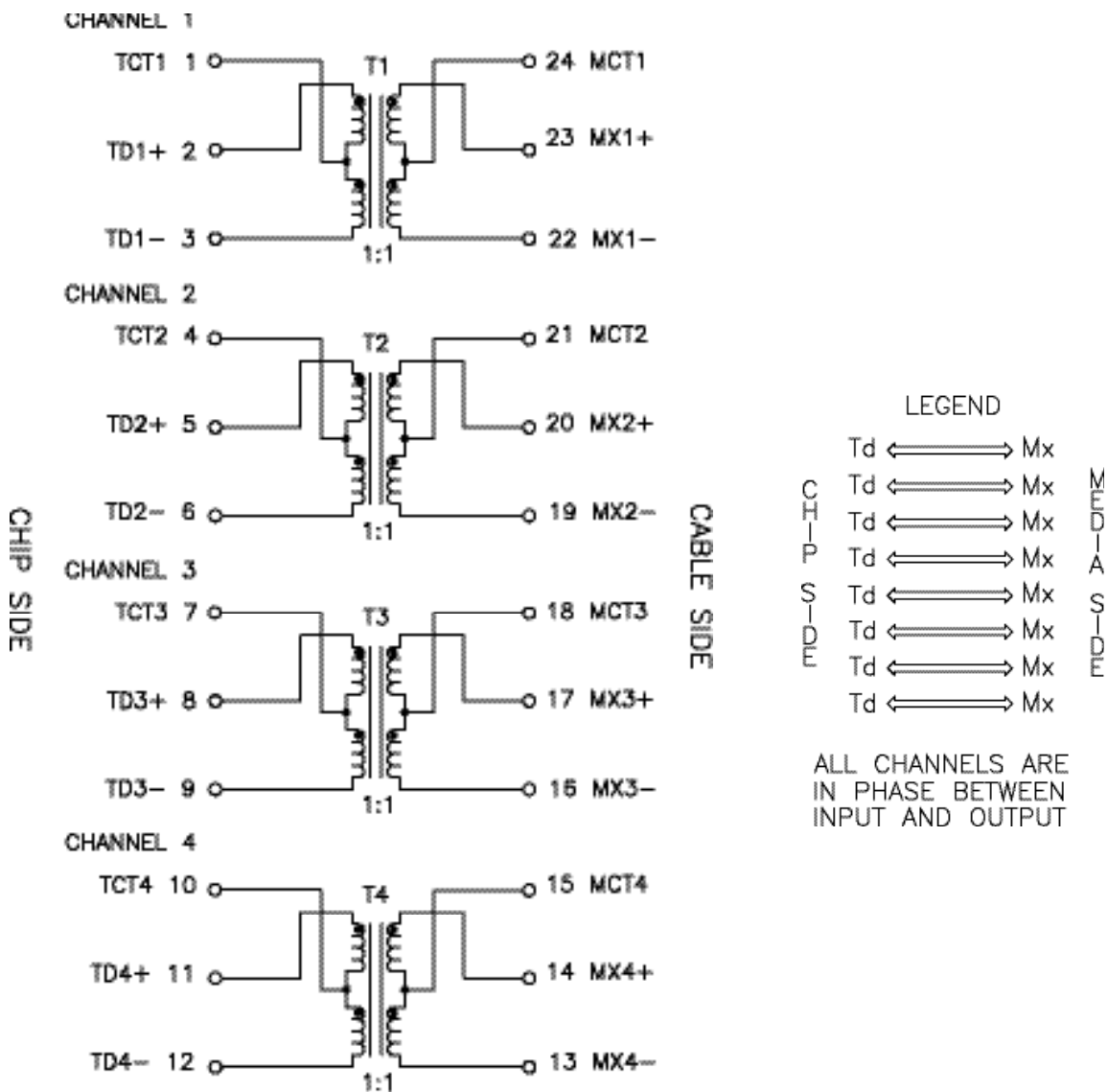
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1000B-5016F

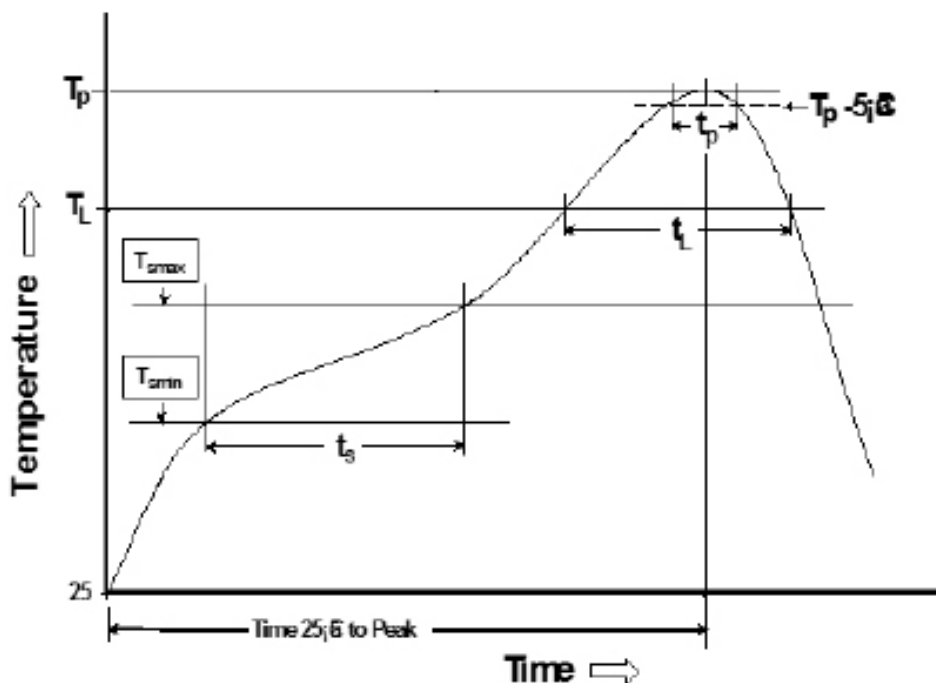


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Tin/Lead Recommended Reflow Profile (Based on J-STD-020D)



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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