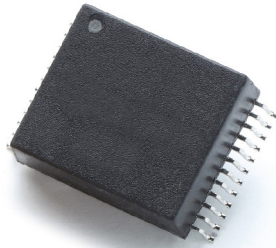


10/100/1000 BASE-T SINGLE & DUAL TRANSFORMER MODULE

Ruggedized

inRCORE
INRCORE FAMILY OF BRANDS



- Compliant with IEEE 802.ab for 1000Base-T
- 350μH OCL with 8mA bias at extended temperatures
- Two Operating Temperature versions available:
 - Standard: -40°C to +85°C
 - Extended: -55°C to +125°C
- Storage Temperature: -55°C to +125°C
- Dielectric Withstanding Voltage (DWW): 1500 Vrms
- Lead finish: Sn63Pb37
- Moisture Sensitivity Level: 3

Electrical Specifications @ 25°C

Part Number	Insertion Loss (dB MAX)				Return Loss (dB MIN)				Crosstalk (dB MIN)			CM to CM Rejection (dB MIN)			DM to CM Rejection (dB MIN)		
	0.10 MHz	30 MHz	60 MHz	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
1000B-5009F	1.4	1.4	1.4	1.4	18	12	10	8	43	37	31	30	25	18	40	35	30
1000B-5009FX	1.4	1.4	1.4	1.4	18	12	10	8	43	37	31	30	25	18	40	35	30
1000B-5012F	1.2	1.2	1.2	1.2	18	12	10	8	43	37	33	40	35	30	43	37	30
1000B-5012FX	1.4	1.4	1.4	1.4	18	12	10	8	43	37	33	40	35	30	43	37	30
1000B-5014F	1.4	1.4	1.4	1.4	16	12	10	8	43	37	33	33	30	28	43	37	30
1000B-5014FX	1.4	1.4	1.4	1.4	16	12	10	8	43	37	33	33	30	28	43	37	30
1000B-5016F	1.2	1.2	1.2	1.2	18	12	12	10	43	37	31	30	23	17	40	35	30

NOTES:

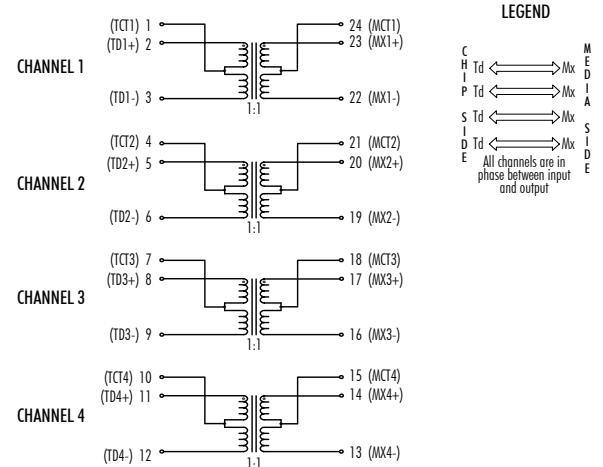
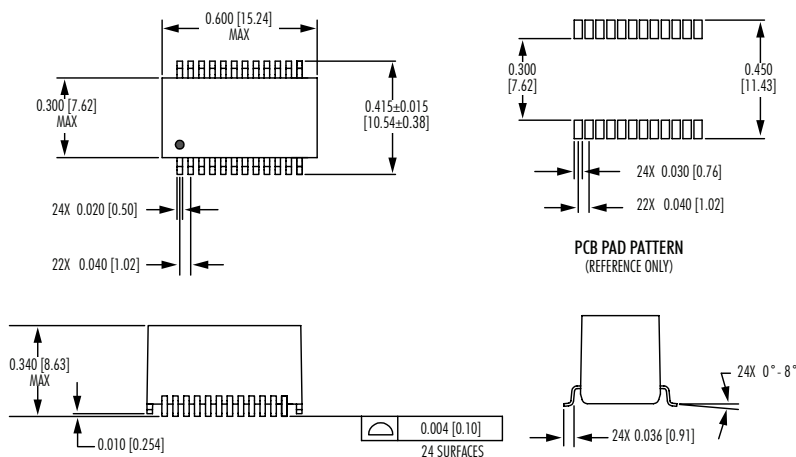
- Add suffix "X" for extended temperature version; i.e. 1000B-5009F becomes **1000B-5009FX**. (*1000B-5016F does not offer an extended temperature version)
- Add suffix "NL" for RoHS compliant version; i.e. 1000B-5012F becomes **1000B-5012FNL**. NL parts have 100% SN Lead Finish.
- For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. **1000B-5014FT**.

Mechanicals

Electrical Schematics

1000B-5009F/X

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



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M160.G (12AUG25)

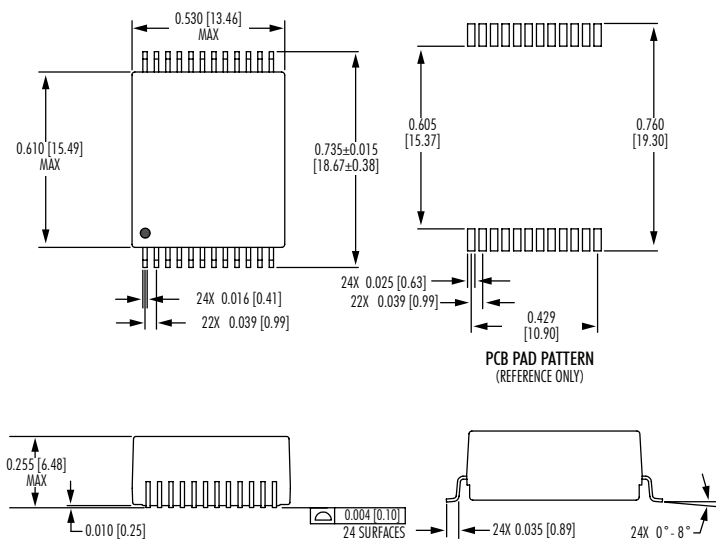
10/100/1000 BASE-T SINGLE & DUAL TRANSFORMER MODULE

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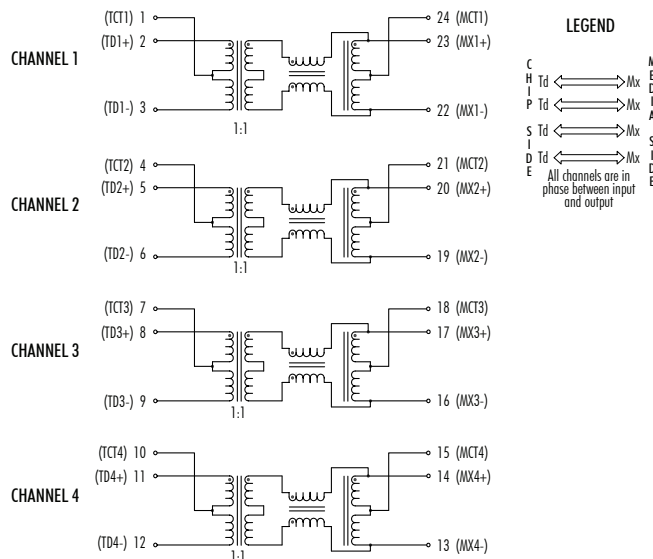
Mechanicals

1000B-5012F/X

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



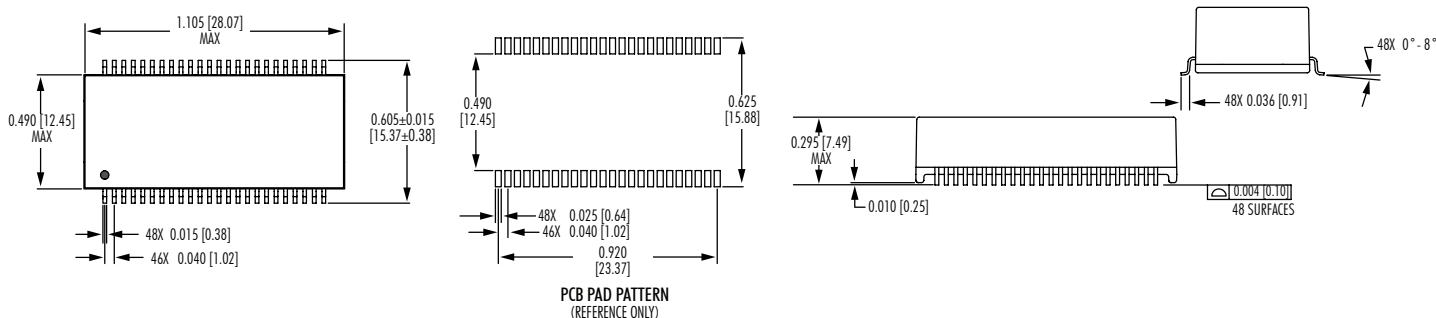
Electrical Schematics



Mechanicals

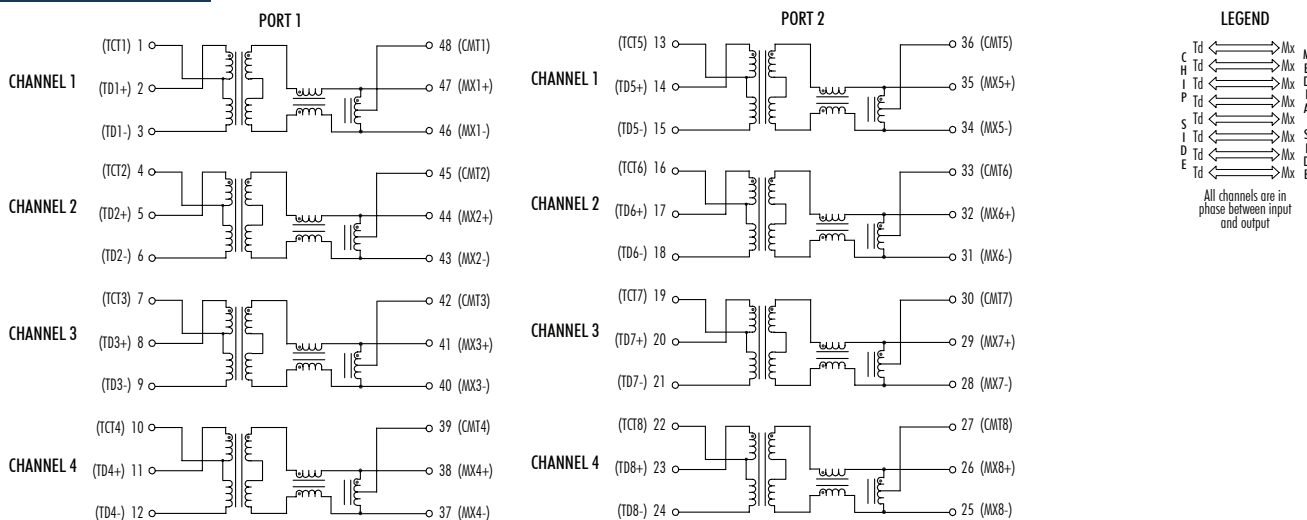
1000B-5014F/X

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



Electrical Schematics

1000B-5014F/X



10/100/1000 BASE-T SINGLE & DUAL TRANSFORMER MODULE

Ruggedized

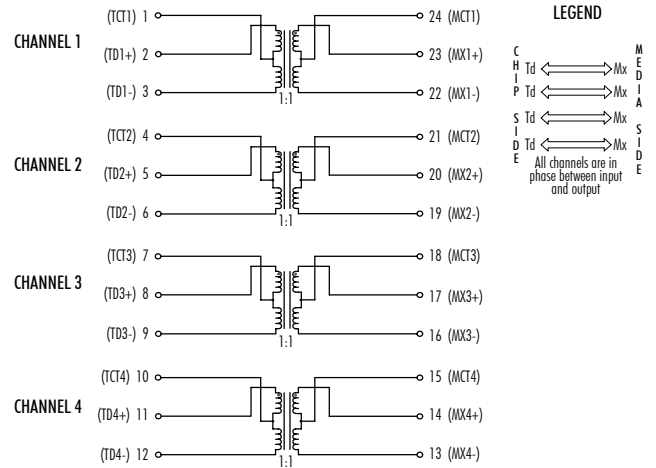
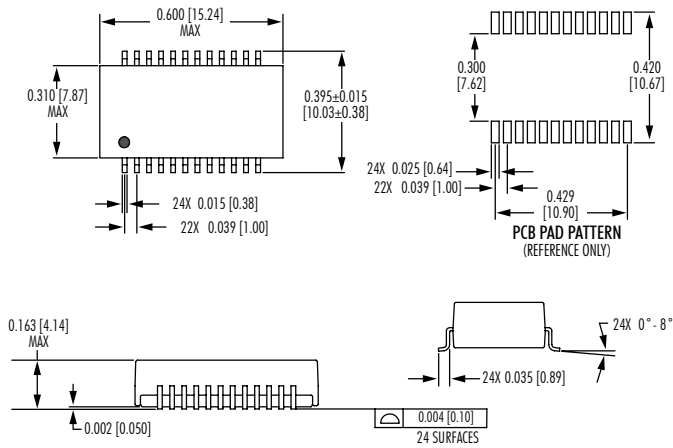


Mechanicals

Electrical Schematics

1000B-5016F

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



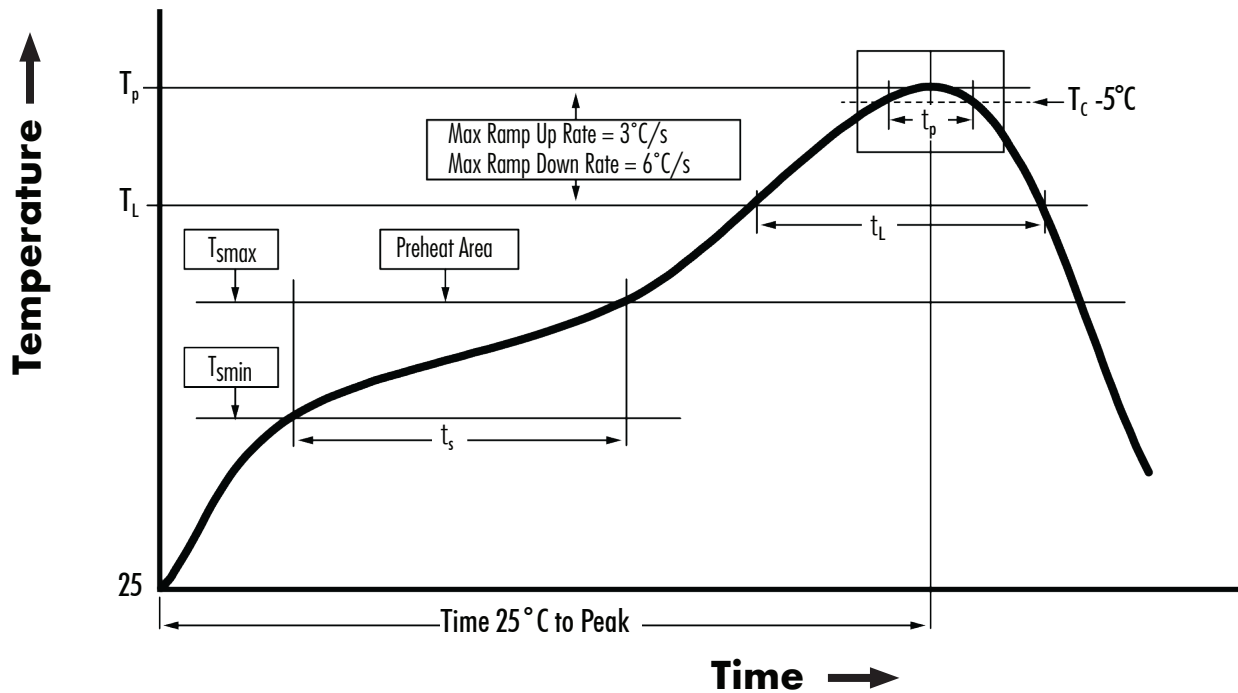
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- M160.G (12AUG25)

10/100/1000 BASE-T SINGLE & DUAL
TRANSFORMER MODULE

Ruggedized

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)
Tin/Lead Profile									
100	150	183	220	60 - 120	60 - 150	20	3°C/s MAX	6°C/s MAX	360
Non-Lead Profile									
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.
 - 3. Reflow cycle applies only to surface mount parts.



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