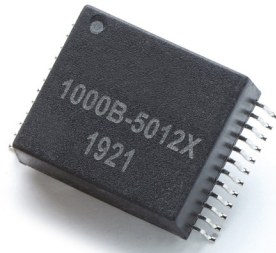


# 10/100/1000 BASE-T SINGLE & DUAL TRANSFORMER MODULE



Ruggedized



- Compliant with IEEE 802.ab for 1000Base-T
- 350µH OCL with 8mA bias at extended temperatures
- Two Operating & Storage Temperature versions available:  
Standard: -40°C to +85°C  
Extended: -55°C to +125°C
- Peak Reflow Temperature: 245°C (for RoHS versions)
- 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)			HiPot (Vrms)
	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	1500
1000B-5009FX	1.4	1.4	1.4	1.4	18	12	10	8	43	37	31	30	25	18	40	35	30	1500
1000B-5012F	1.2	1.2	1.2	1.2	18	12	10	8	43	37	33	40	35	30	43	37	30	1500
1000B-5012FX	1.2	1.2	1.2	1.2	18	12	10	8	43	37	33	40	35	30	43	37	30	1500
1000B-5014F	1.4	1.4	1.4	1.4	16	12	10	8	43	37	33	33	30	28	43	37	30	1500
1000B-5014FX	1.4	1.4	1.4	1.4	16	12	10	8	43	37	33	33	30	28	43	37	30	1500
1000B-5016F	1.2	1.2	1.2	1.2	18	12	12	10	43	37	31	30	23	17	40	35	30	1500

### NOTES:

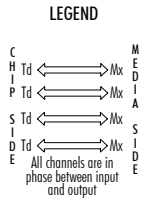
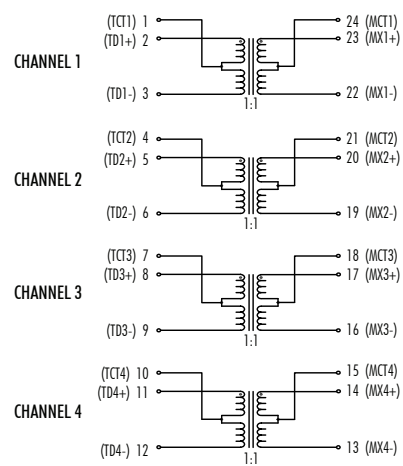
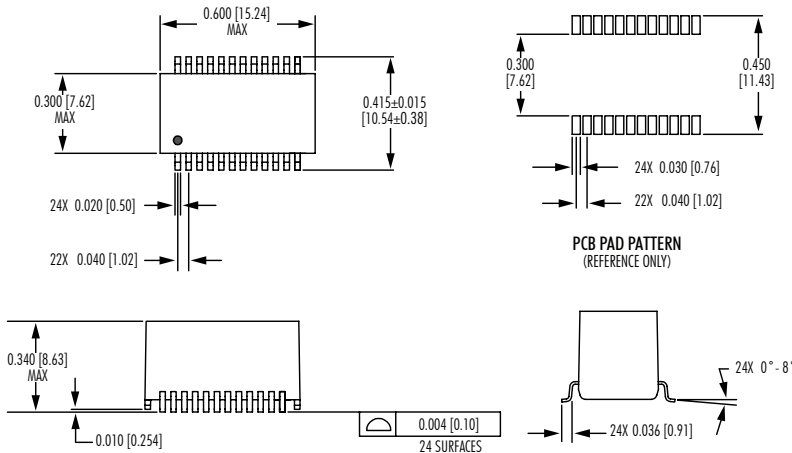
- Add suffix "X" for extended temperature version; i.e. 1000B-5009F becomes **1000B-5009FX**. (\*1000B-5016F does not offer an extended temperature version)
- Add suffix "NL" for RoHS compliant version; i.e. 1000B-1012F becomes **1000B-1012FNL**. NL parts have 100% SN Lead Finish (MSL:4).
- For Tape & 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]



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



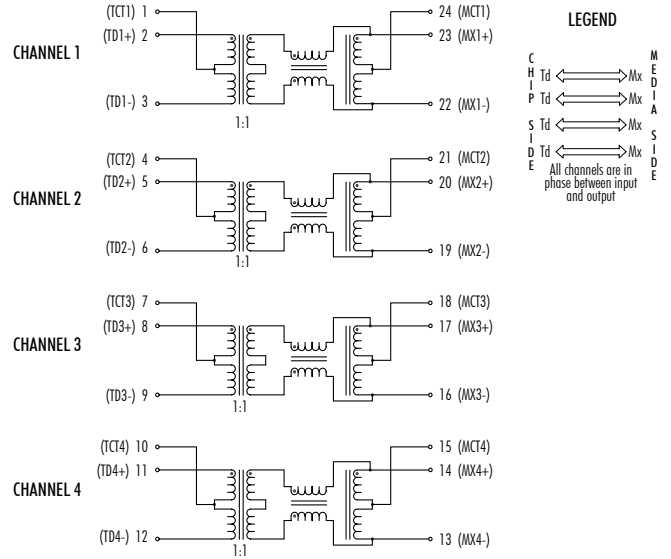
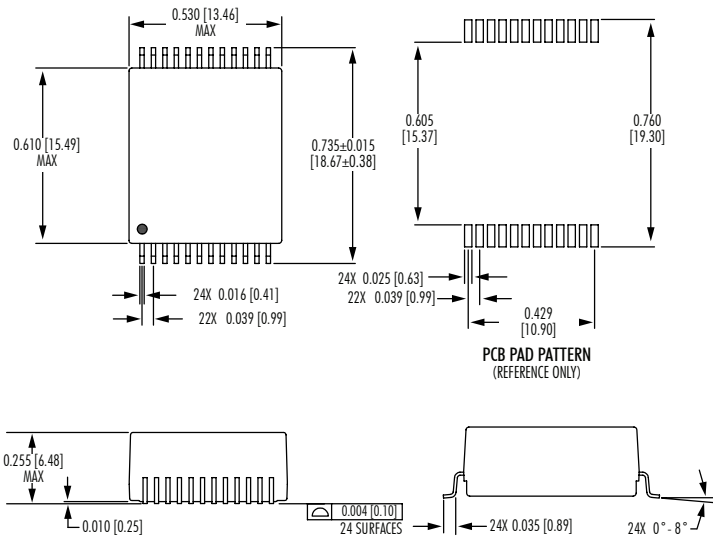
Ruggedized

## Mechanicals

## Electrical Schematics

### 1000B-5012F/X

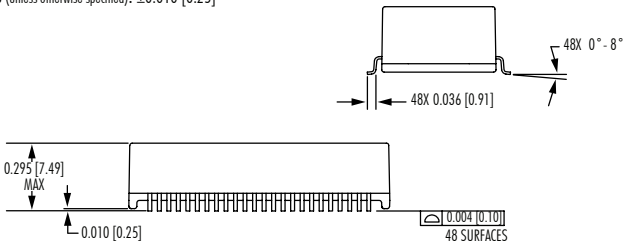
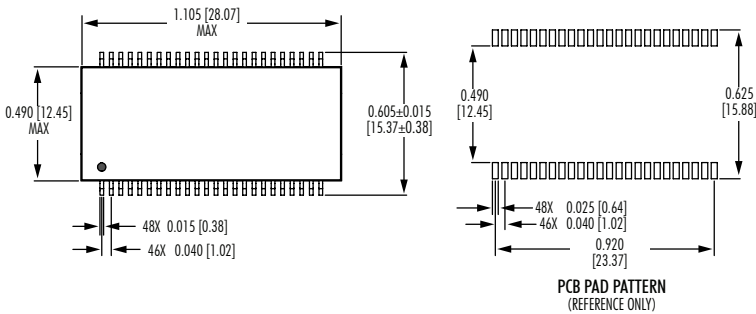
Dimensions: inch [mm]  
Tolerance (unless otherwise specified): ±0.010 [0.25]



## Mechanicals

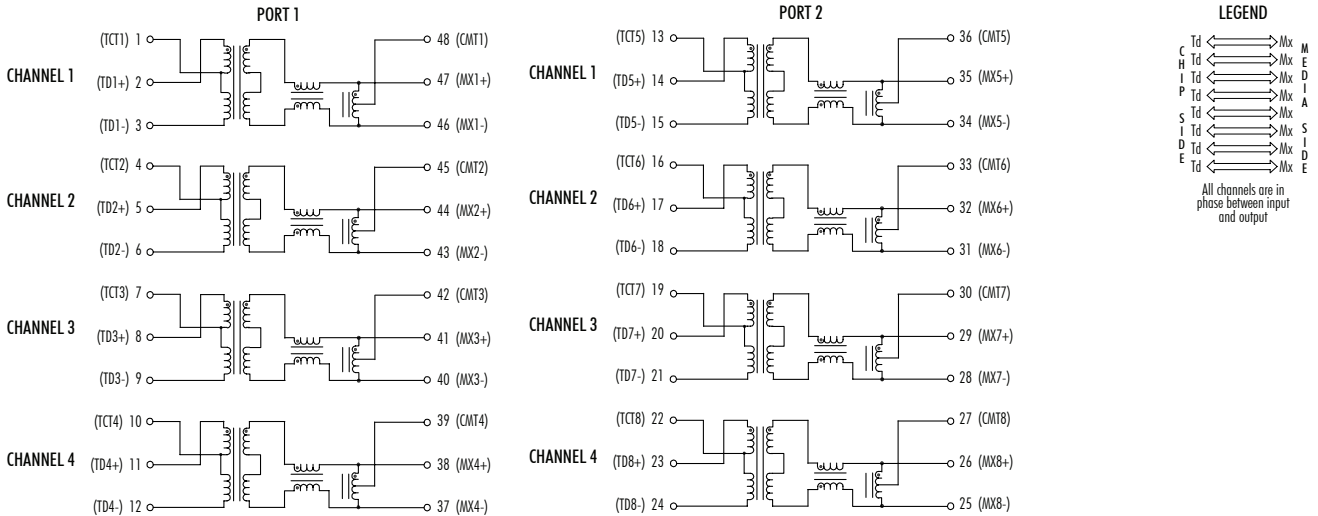
### 1000B-5014F/X

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



## Electrical Schematics

### 1000B-5014F/X



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MT60.G (11/21)



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