

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



Ruggedized

- ⦿ Compliant with IEEE 802.3ab for 1000 Base-T
- ⦿ 350µH 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; RoHS version withstands 245°C
- ⦿ 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 | 80 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 | 60 Hz |
| 1000B-5001 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 18 | 12 | 10 | 10 | 43 | 37 | 33 | 40 | 35 | 30 | 43 | 37 | 33 | 1500 |
| 1000B-5001X | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 18 | 12 | 10 | 8 | 43 | 37 | 33 | 40 | 35 | 30 | 43 | 37 | 33 | 1500 |
| 1000B-5002 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 18 | 14 | 12 | 10 | 43 | 37 | 33 | 40 | 35 | 30 | 43 | 37 | 33 | 1500 |
| 1000B-5002X | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 18 | 14 | 12 | 10 | 43 | 37 | 33 | 40 | 35 | 30 | 43 | 37 | 33 | 1500 |
| 1000B-5003 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 18 | 14 | 11 | 9 | 43 | 37 | 33 | 40 | 35 | 30 | 43 | 37 | 33 | 1500 |
| 1000B-5003X | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 18 | 14 | 11 | 9 | 43 | 37 | 33 | 40 | 35 | 30 | 43 | 37 | 33 | 1500 |

NOTES:

1. Add suffix "NL" for RoHS compliant version; i.e. 1000B-5001 becomes **1000B-5001NL**. NL parts have 100% SN Lead Finish (MSL:4)
2. For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. **1000B-5001NLT**

Mechanicals

Electrical Schematics

1000B-5001/X

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

PCB PAD PATTERN
(REFERENCE ONLY)

LEGEND

| | |
|---|---|
| C | M |
| H | E |
| I | D |
| P | I |
| T | A |
| D | S |
| I | I |
| D | D |
| E | E |

All channels are in phase between input and output



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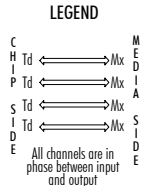
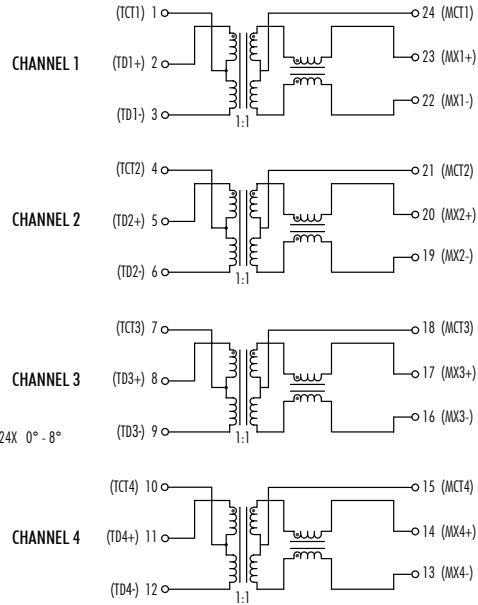
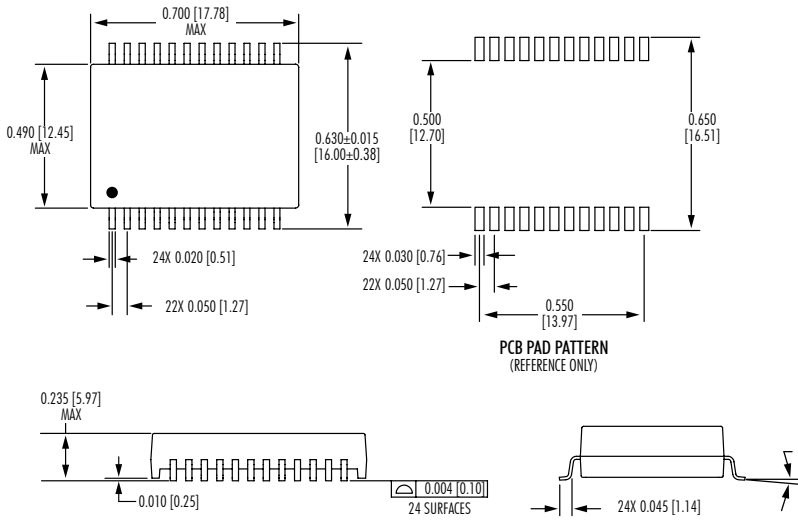
Ruggedized

Mechanicals

Electrical Schematics

1000B-5002/X

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

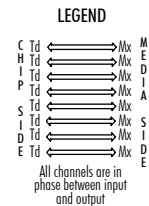
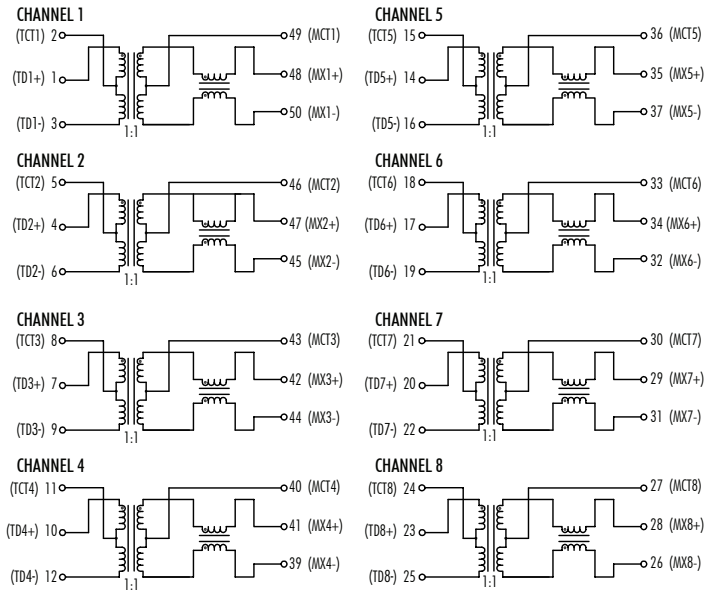
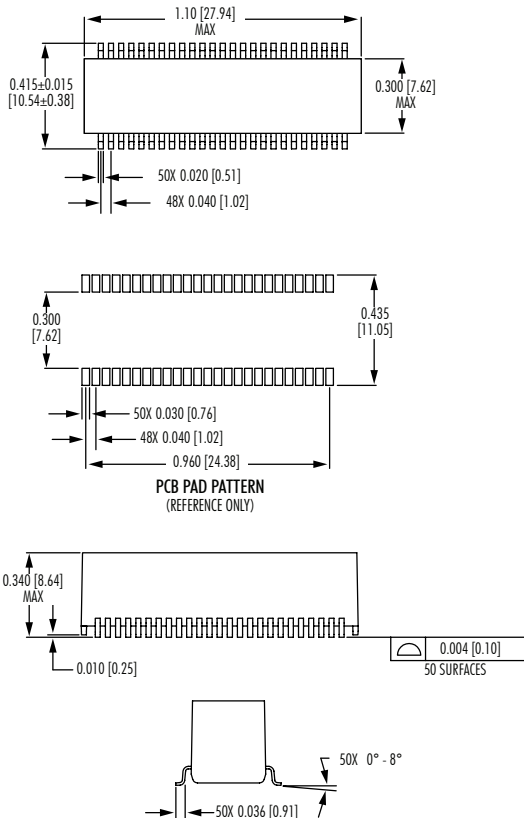


Mechanicals

Electrical Schematics

1000B-5003/X

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



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