





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

Military / Aerospace Grade



-  Compliant with IEEE 802.ab for 1000Base-T
-  350µH OCL with 8mA bias at extended temperatures
-  Operating and storage 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

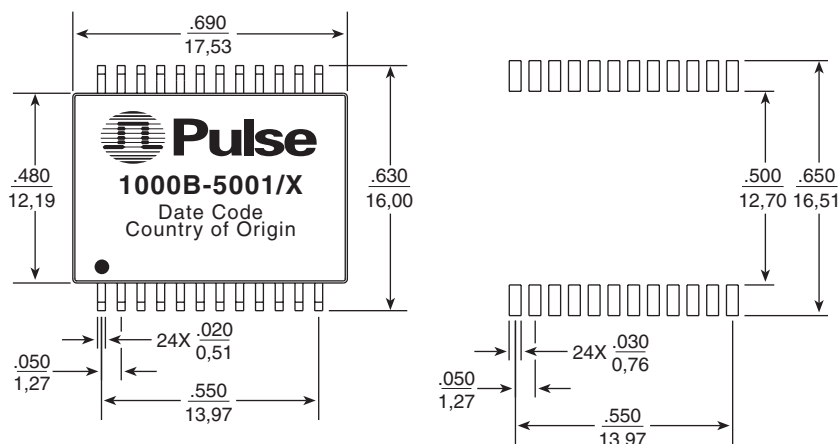
Electrical Specifications @ 25°C

Part Number ¹	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)		
		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
1000B-5001	-1.20	-18	-12	-10	-10	-43	-37	-33	-40	-35	-30	-43	-37	-33
1000B-5001X	-1.40	-18	-12	-10	-8	-43	-37	-33	-40	-35	-30	-43	-37	-33
1000B-5002	-1.20	-18	-14	-12	-10	-43	-37	-33	-40	-35	-30	-43	-37	-33
1000B-5002X	-1.20	-18	-14	-12	-10	-43	-37	-33	-40	-35	-30	-43	-37	-33
1000B-5003	-1.20	-18	-14	-11	-9	-43	-37	-33	-40	-35	-30	-43	-37	-33
1000B-5003X	-1.20	-18	-14	-11	-9	-43	-37	-33	-40	-35	-30	-43	-37	-33

Note: 1. Add suffix NL for RoHS compliant part; i.e. 1000B-5001 becomes 1000B-5001NL.

Mechanical

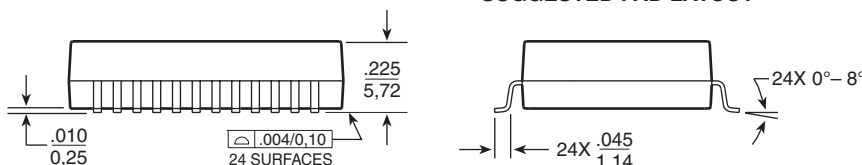
1000B-5001/X



Weight 3.0 grams
 Tape and Reel 300/reel
 Tube25/tube

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

SUGGESTED PAD LAYOUT



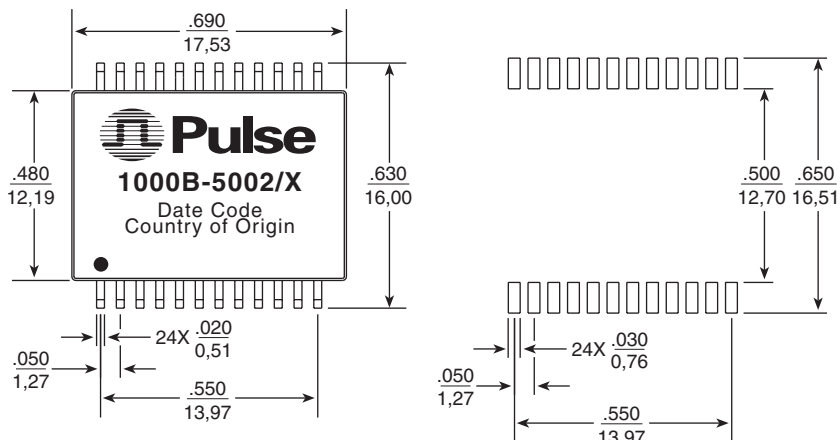
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Mechanicals

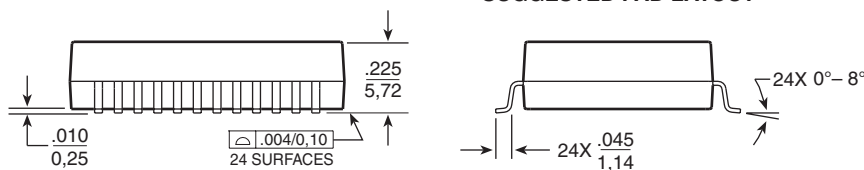
1000B-5002/X



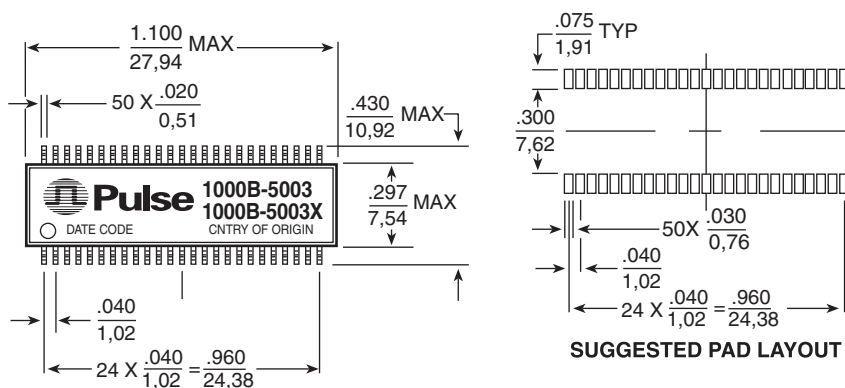
Weight2.6 grams
Tape and Reel 300/reel
Tube25/tube

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

SUGGESTED PAD LAYOUT



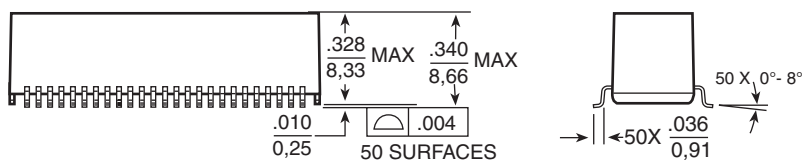
1000B-5003/X



Weight3.5 grams
Tape and Reel 250/reel
Tube15/tube

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

SUGGESTED PAD LAYOUT



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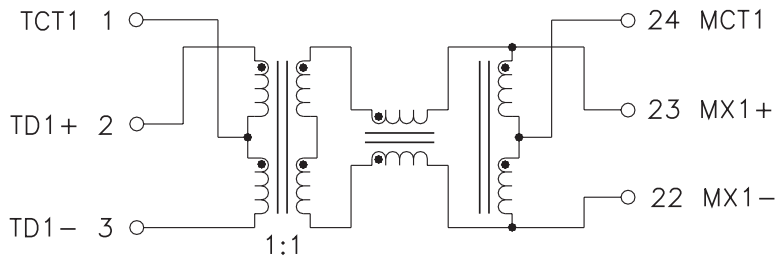
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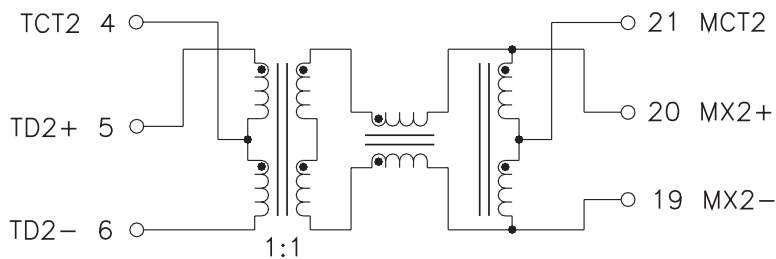
Electrical Schematic

1000B-5001/X

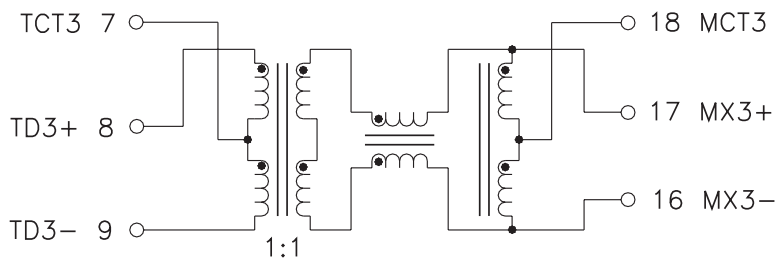
CHANNEL 1



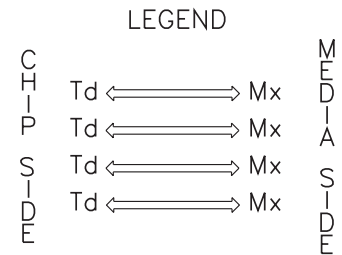
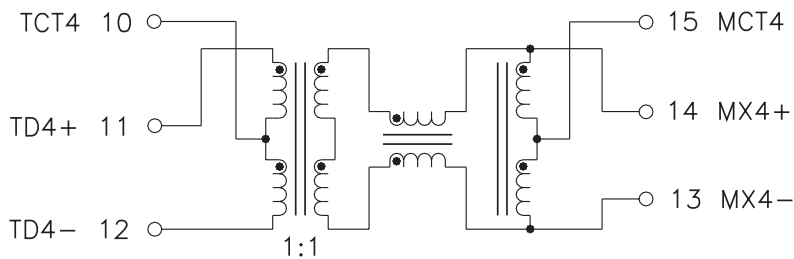
CHANNEL 2



CHANNEL 3



CHANNEL 4



ALL CHANNELS ARE IN PHASE BETWEEN INPUT AND OUTPUT

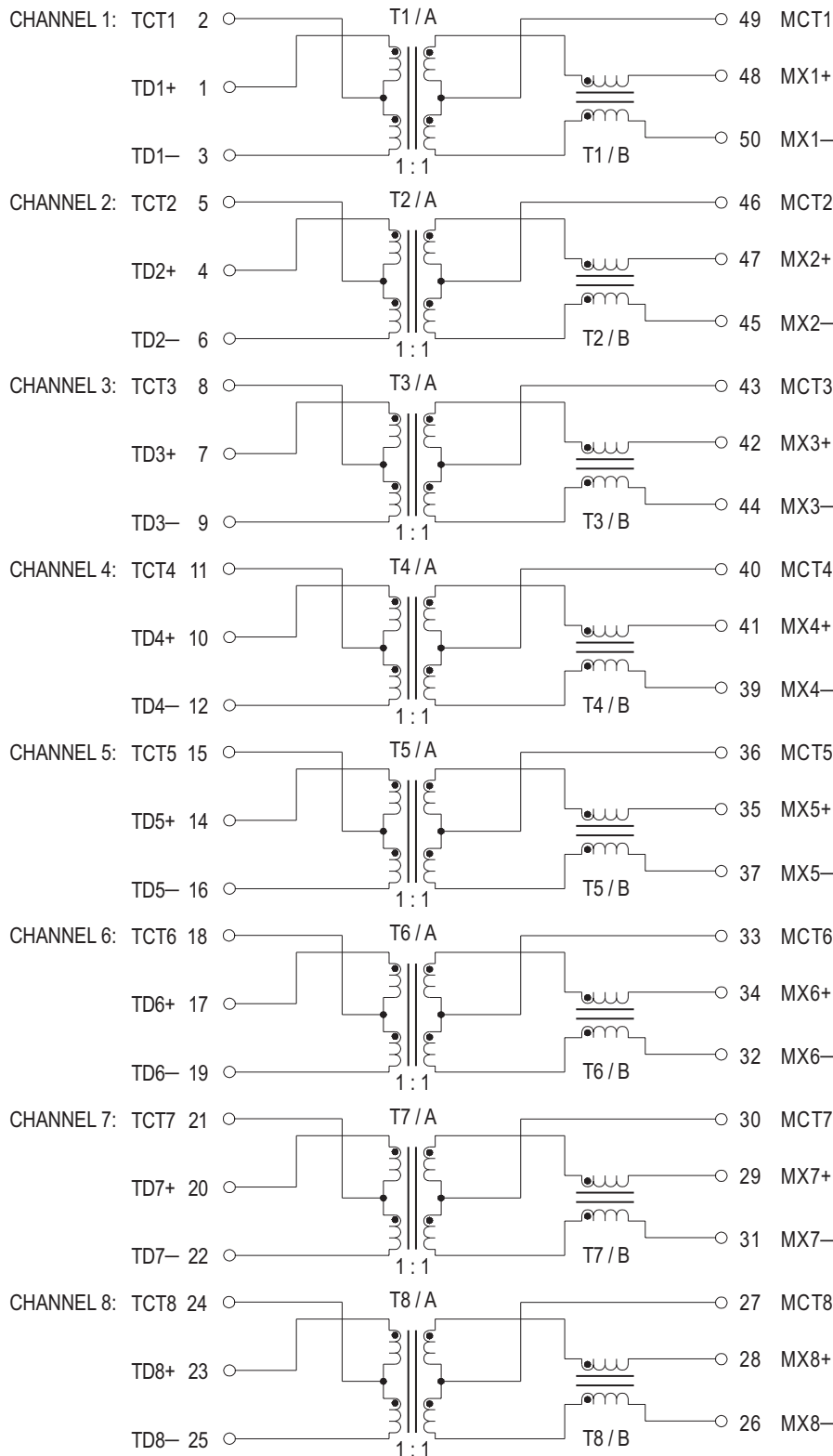
10/100/1000BASE-T SINGLE & DUAL-PORT TRANSFORMER MODULES

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Electrical Schematic

1000B-5003/X



LEGEND

C I P
S I D E
T d
M x
M E D I A
S I D E

ALL CHANNELS ARE IN PHASE BETWEEN INPUT AND OUTPUT

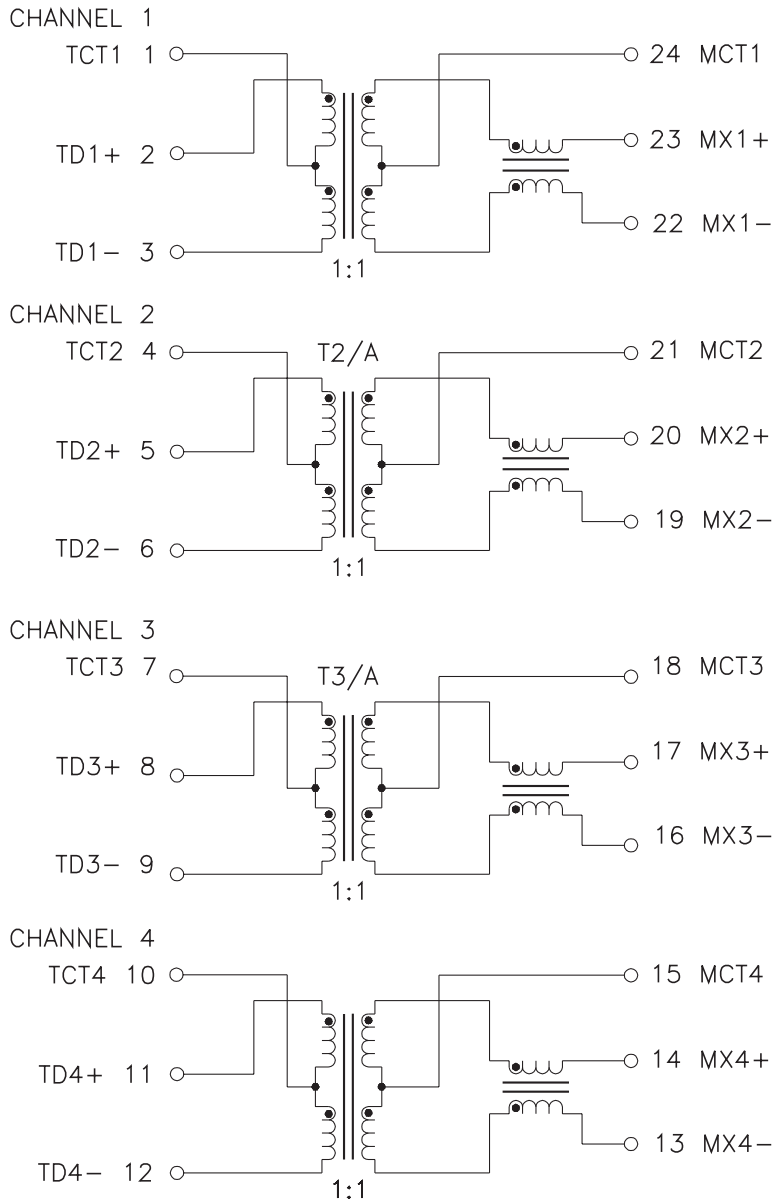
10/100/1000BASE-T SINGLE & DUAL-PORT TRANSFORMER MODULES

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Electrical Schematic

1000B-5002/X



LEGEND

C H I P S I D E	T _d ← → M _x	M E D I A S I D E
	T _d ← → M _x	
	T _d ← → M _x	
	T _d ← → M _x	

ALL CHANNELS ARE IN PHASE BETWEEN INPUT AND OUTPUT

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