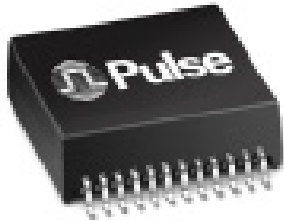






# 10/100/1000BASE-T SINGLE & DUAL-PORT TRANSFORMER MODULES

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

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

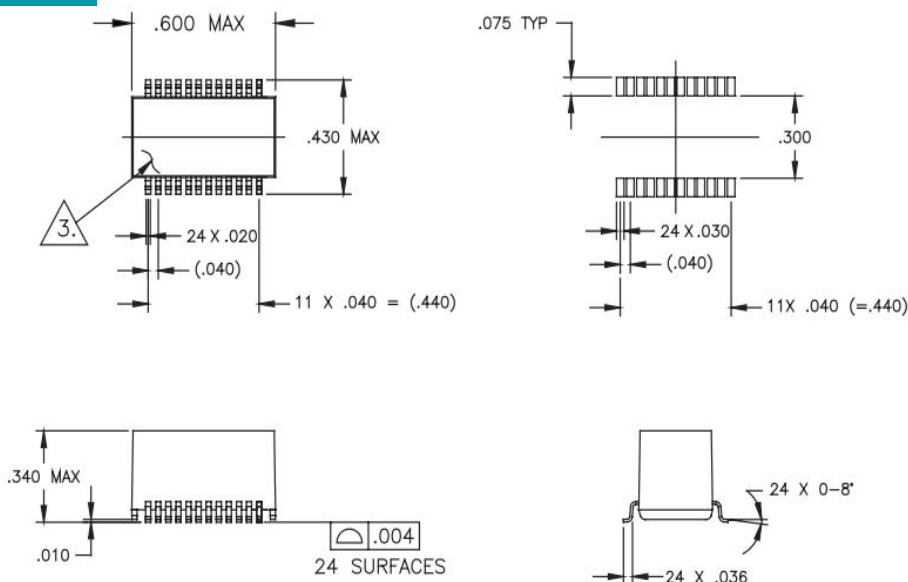
Part Number <sup>1,2</sup>	Insertion Loss (dB Min)	Return Loss (dB Max)				Crosstalk (dB Max)			CM to CM Rejection Ratio (dB Max)			DM to CM Rejection Ratio (dB Max)			Hipot (Vrms)
		0.1-100 Mhz	30 Mhz	60 Mhz	80 Mhz	100 Mhz	30 Mhz	60 Mhz	100 Mhz	30 Mhz	60 Mhz	100 Mhz	30 Mhz	60 Mhz	
1000B-5009F	-1.2	-18	-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



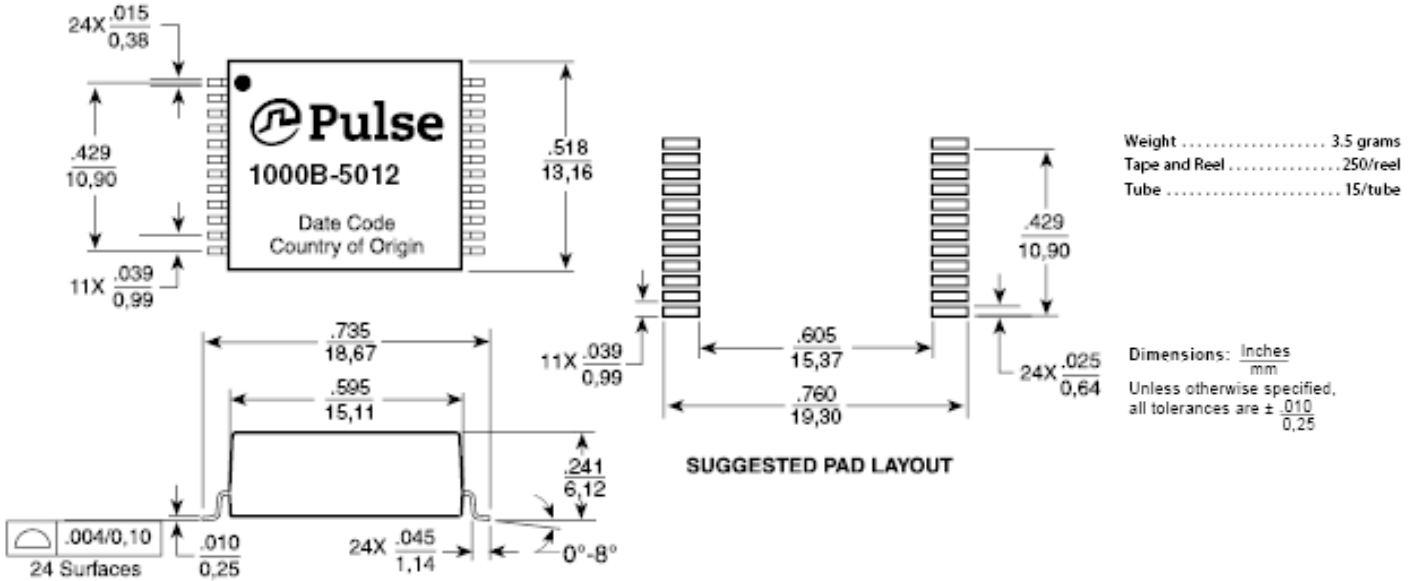
Weight ..... 0.75 grams  
Tape and Reel ..... 250/reel  
Tube ..... 15/tube

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

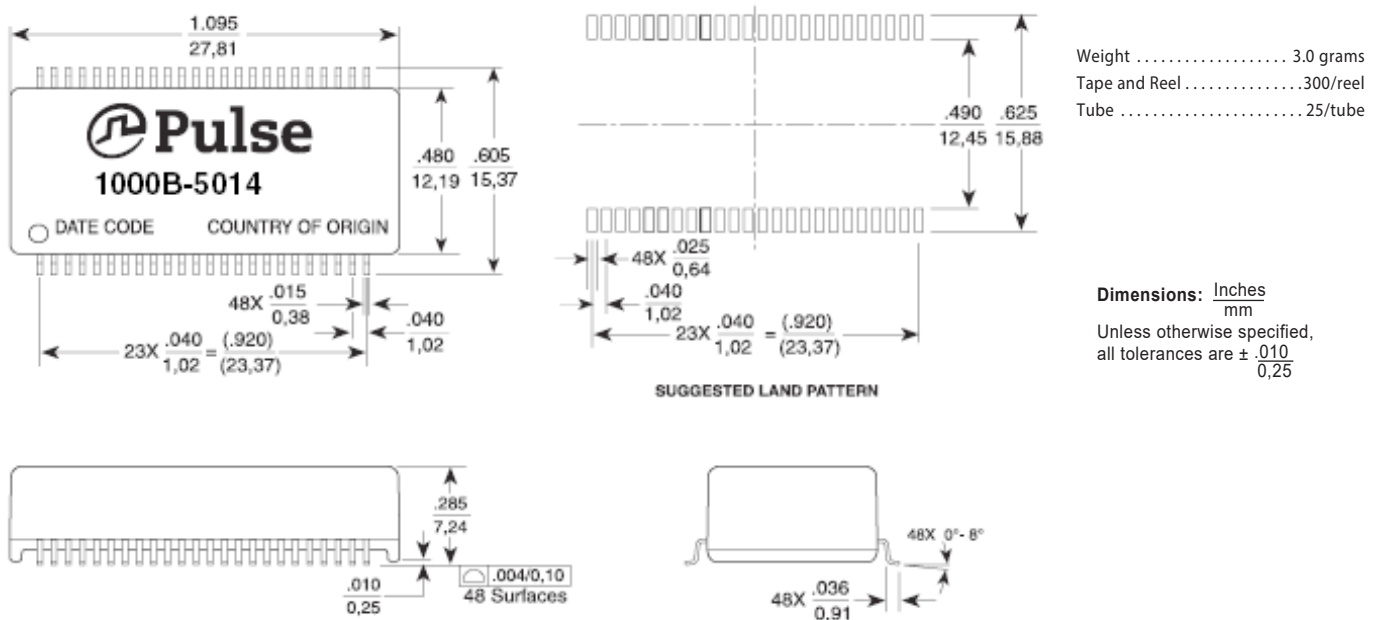
# 10/100/1000BASE-T SINGLE & DUAL-PORT TRANSFORMER MODULES

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## 1000B-5012/X



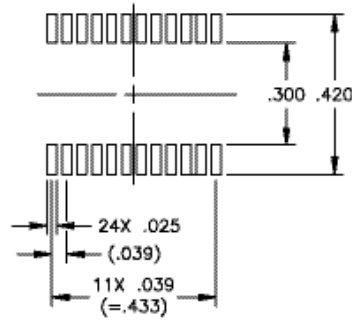
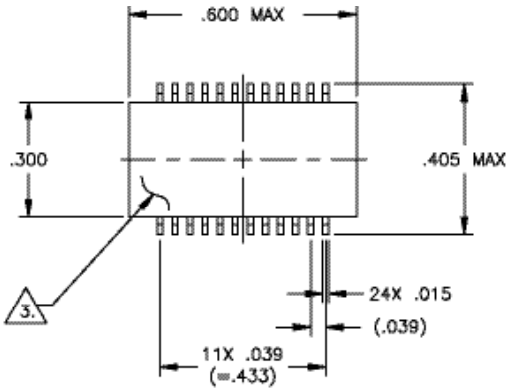
## 1000B-5014F/X



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

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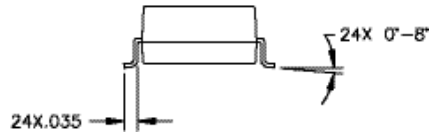
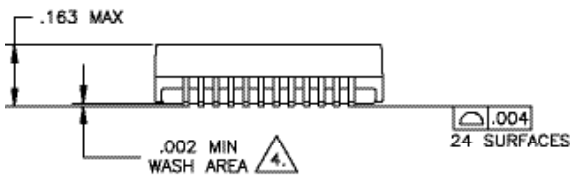
1000B-5016F



SUGGESTED LAND PATTERN

Weight ..... 0.75 grams  
Tape and Reel ..... .700/reel  
Tube ..... 30/tube

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



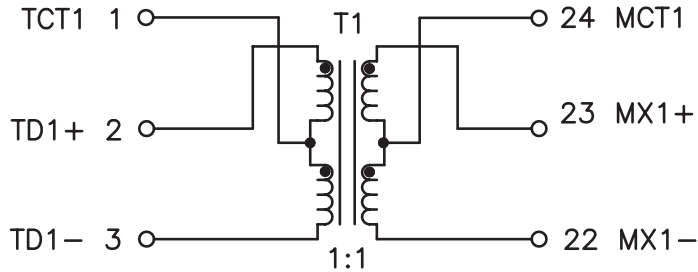
# 10/100/1000BASE-T SINGLE & DUAL-PORT TRANSFORMER MODULES

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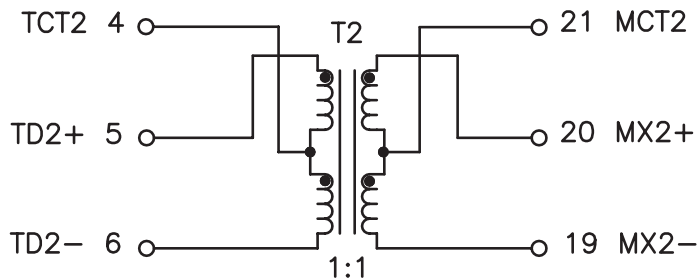
## Electrical Schematics

1000B-5009F/X

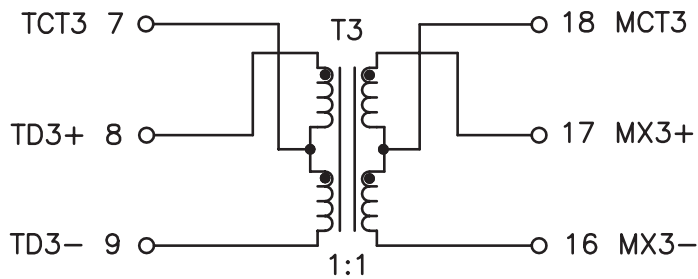
CHANNEL 1



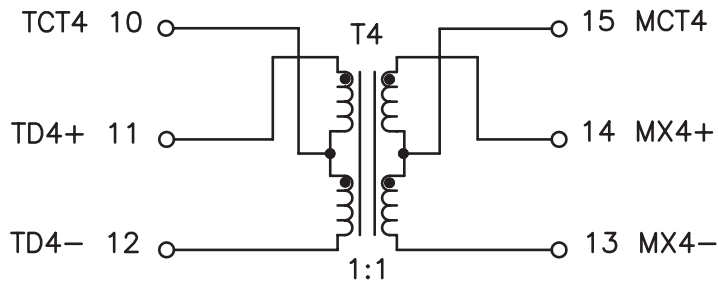
CHANNEL 2



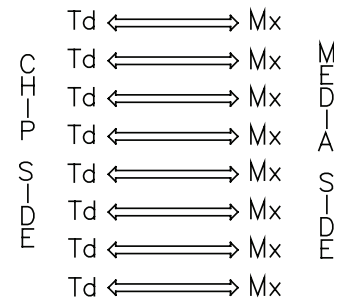
CHANNEL 3



CHANNEL 4



### LEGEND

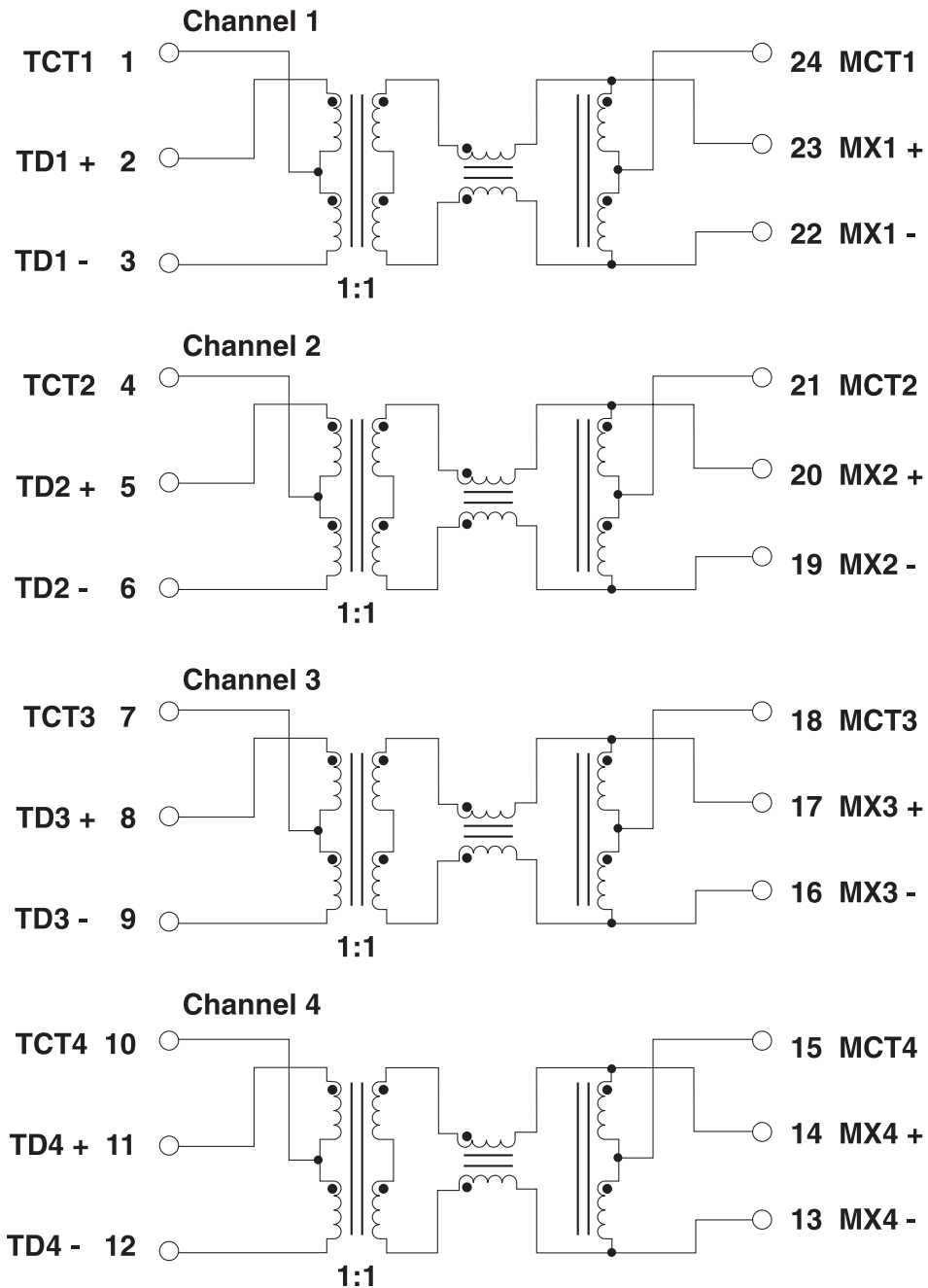


ALL CHANNELS ARE IN PHASE BETWEEN INPUT AND OUTPUT

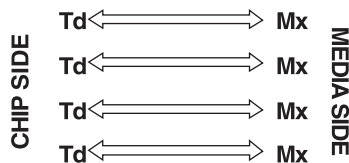
# 10/100/1000BASE-T SINGLE & DUAL-PORT TRANSFORMER MODULES

Ruggedized

1000B-5012F/X



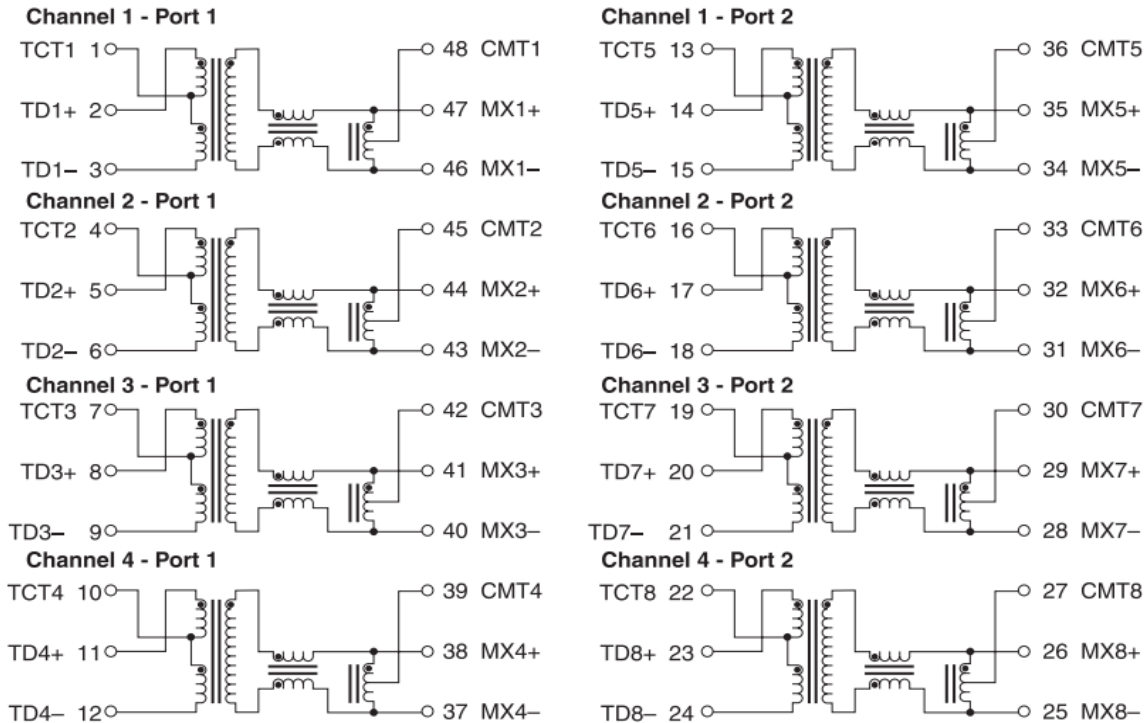
**LEGEND**



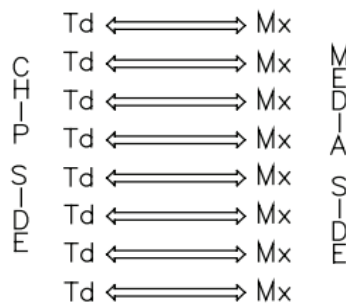
# 10/100/1000BASE-T SINGLE & DUAL-PORT TRANSFORMER MODULES

Ruggedized

**1000B-5014F/X**



**LEGEND**

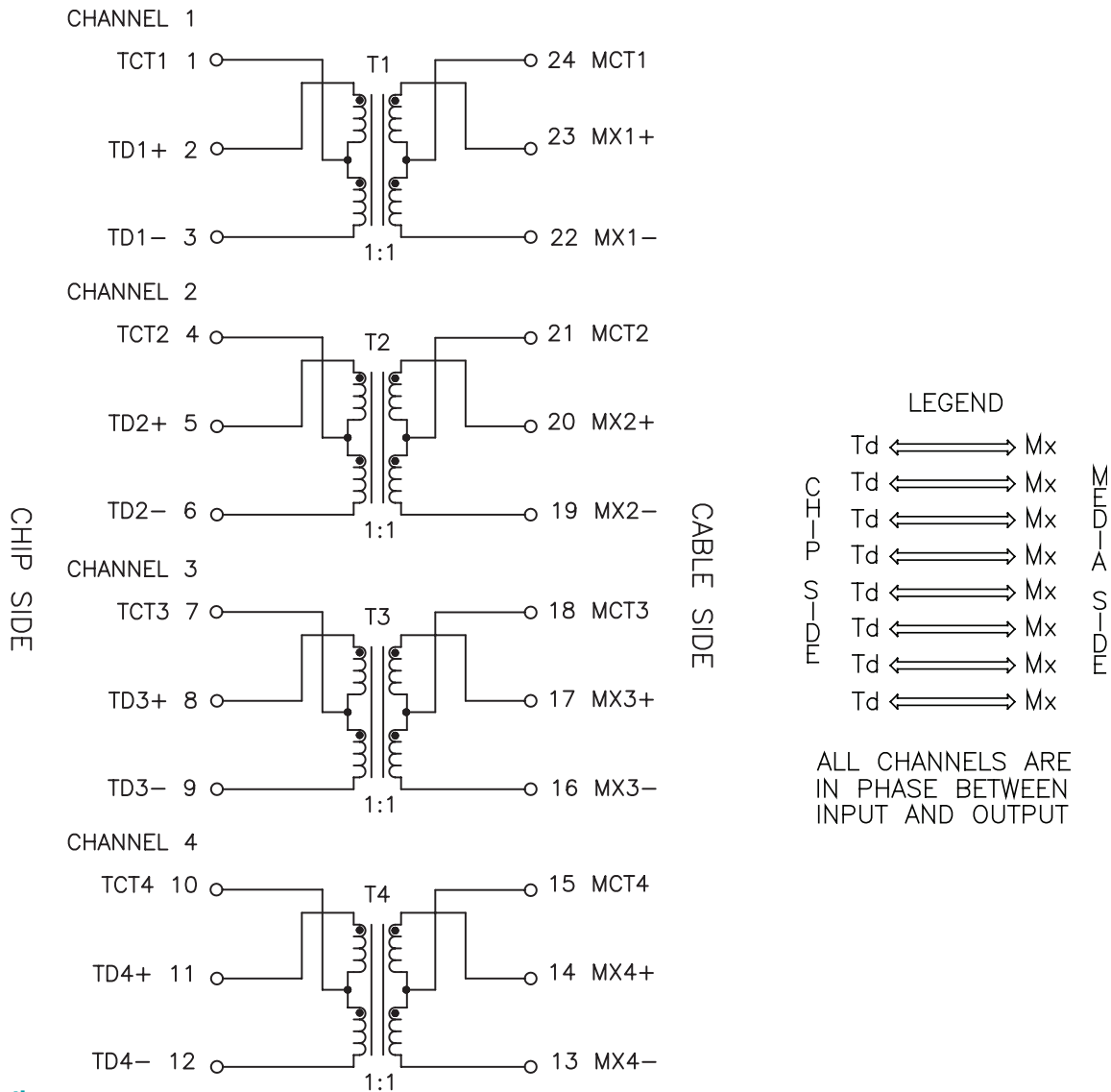


ALL CHANNELS ARE IN PHASE BETWEEN INPUT AND OUTPUT

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

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## 1000B-5016F



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