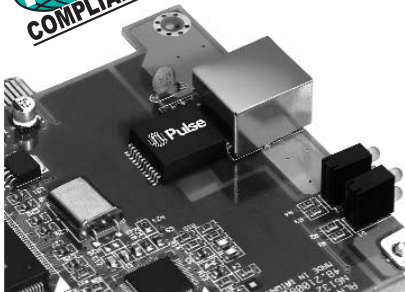


1000BASE-T MAGNETICS MODULES

Designed to Support 1:1 Turns Ratio Transceivers



- Ⓡ For RoHS part add suffix **NL³**
- Ⓡ Peak solder temperature rating per Table 5-2 in IPC/JEDEC J-STD-020C
- Ⓡ Meets IEEE 802.3 specification

Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

Part ² Number	RoHS ³	Number of Ports	Insertion Loss (dB MAX)	Return Loss (dB MIN)					Differential to Common Mode Rejection (dB MIN)			Crosstalk (dB MIN)			Hipot (V _{RMS} MIN)
				1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	100MHz	30MHz	60MHz	100MHz	30MHz	60MHz	
H5004	4, 5c	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
HX5004 ¹	NL ^{5c}	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
H5007	NL ^{5d}	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
H5008	NL ^{5c}	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
HX5008 ¹	NL ^{5a}	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
H5009	NL ^{5a}	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
H5012	NL ^{5a}	2	1.4	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-43.5	-37.5	-33	1500
H5014	NL ^{5a}	2	1.4	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-43.5	-37.5	-33	1500
HX5014 ¹	4, 5a	2	1.4	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-43.5	-37.5	-33	1500
H5015	NL ^{5a}	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
H5020	NL ^{5c}	2	1	-18	-14.4	-13.1	-12	-10	-40	-35	-30	-40	-33	-28	1500
HX5020 ¹	4, 5c	2	1	-18	-14.4	-13.1	-12	-10	-40	-35	-30	-40	-33	-28	1500

1. HX: Extended temperature version -40°C to +85°C
2. For Tape & Reel packaging, add a "T" suffix at the end of the part number, e.g. H5007T.
3. When ordering RoHS compliant parts, add the suffix NL, e.g. H5007 changes to H5007NL or H5007NLT (for Tape and Reel).
4. Contact Pulse for RoHS compliant part availability.
5. MSL=Moisture Sensitivity Level: a=1 b=2 c=3 d=4

Mechanicals

H5004, HX5004, H5007*

SUGGESTED PAD LAYOUT

* HX5004 and H5004/7 are footprint compatible to 10/100BASE-TX part H1267.

H5008, HX5008, H5009

SUGGESTED PAD LAYOUT

Dimensions: $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified, all tolerances are $\pm \frac{.005}{0,13}$

Weight 1.6 grams
Tape & Reel300
Tube35

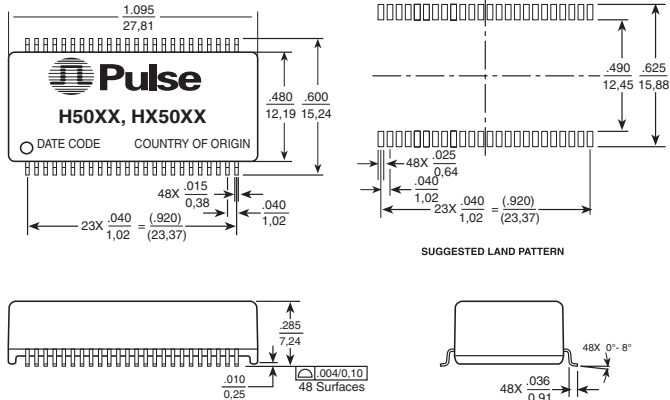
1000BASE-T MAGNETICS MODULES

Designed to Support 1:1 Turns Ratio Transceivers



Mechanicals (continued)

H5012, H5014, HX5014

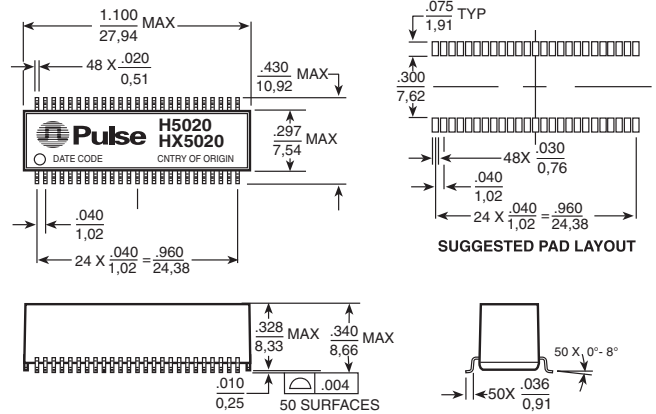


Weight 4.0 grams
Tape & Reel250/reel
Tube15/tube

Dimensions: $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

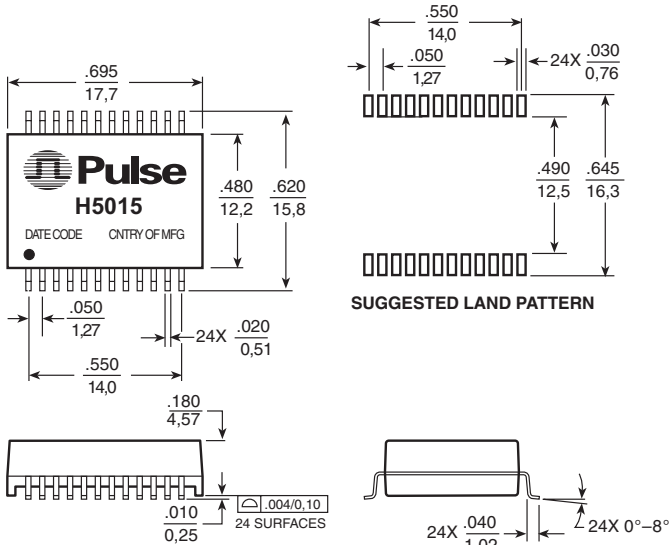
H5020, HX5020



Weight 1.6 grams
Tape & Reel250/reel
Tube15/tube

Mechanicals (continued)

H5015



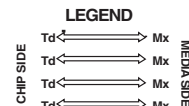
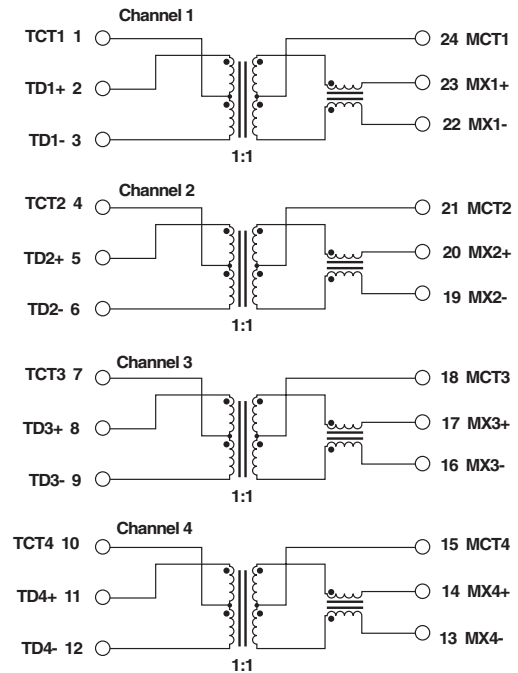
Weight 1.5 grams
Tape & Reel400/reel

Dimensions: $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified, all tolerances are $\pm \frac{.005}{0,13}$

Schematics

H5004, HX5004, H5009



1000BASE-T MAGNETICS MODULES

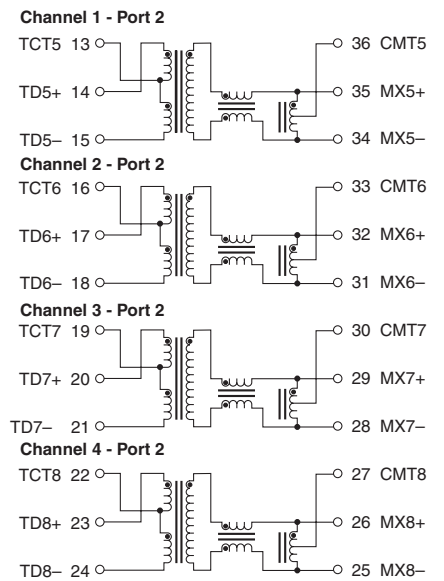
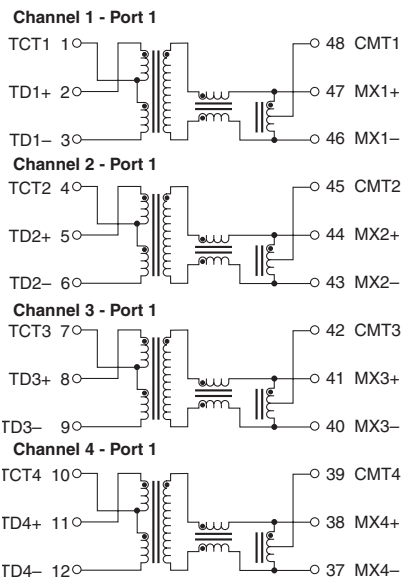
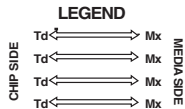
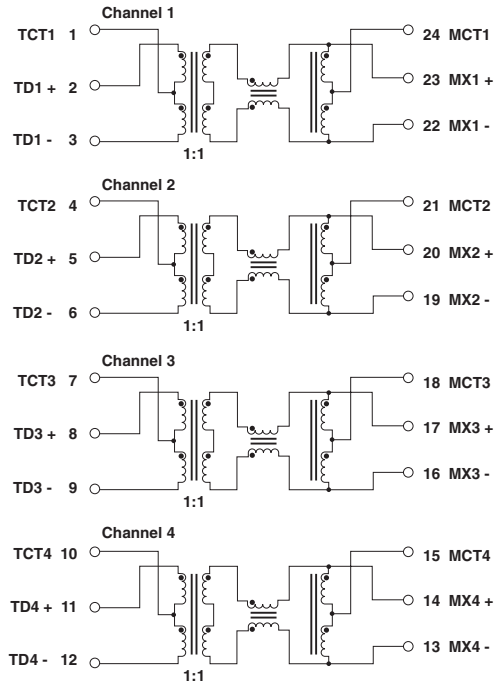
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Turns Ratio Transceivers



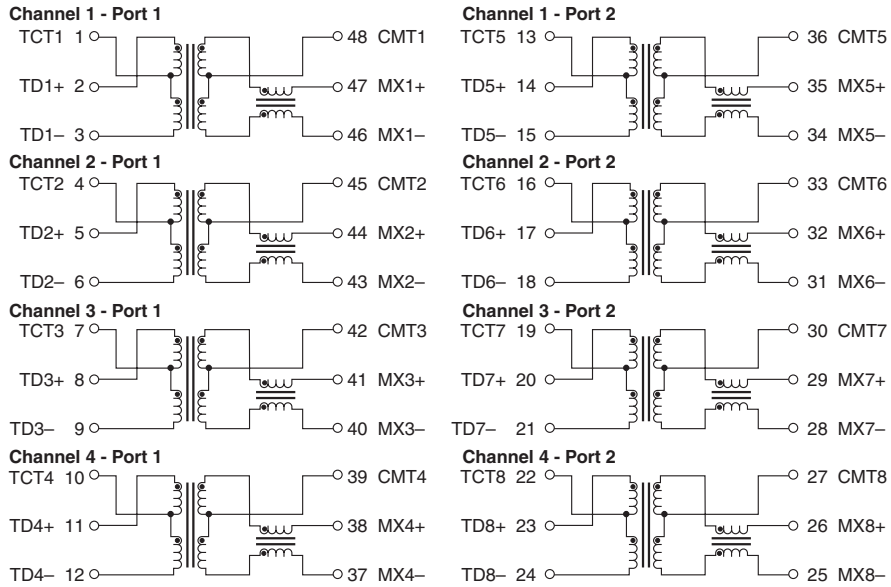
Schematics (continued)

H5007*, H5008, HX5008, H5015

H5012 *



H5014, HX5014



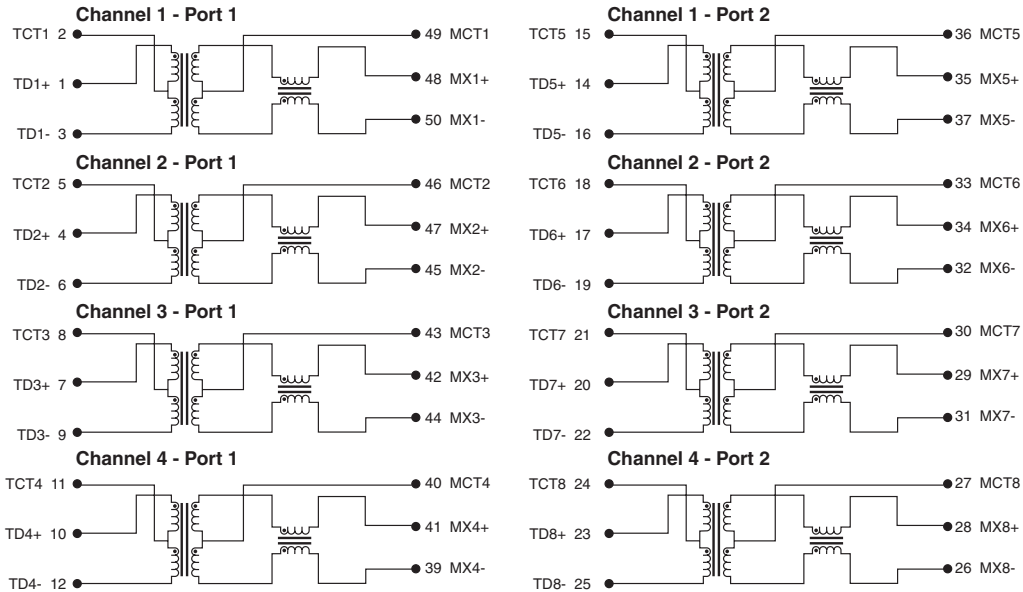
1000BASE-T MAGNETICS MODULES

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Schematics (continued)

H5020, HX5020



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