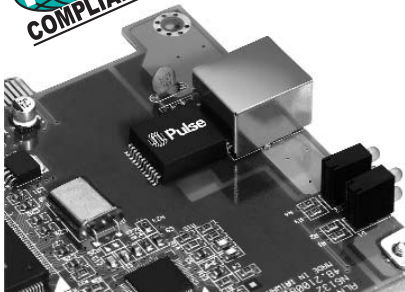


1000BASE-T MAGNETICS MODULES

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 ^{5c}	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

- HX: Extended temperature version -40°C to +85°C
- For Tape & Reel packaging, add a "T" suffix at the end of the part number, e.g. H5007T.
- When ordering RoHS compliant parts, add the suffix NL, e.g. H5007 changes to H5007NL or H5007NLT (for Tape and Reel).
- Contact Pulse for RoHS compliant part availability.
- 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 & Reel 300

Tube 35

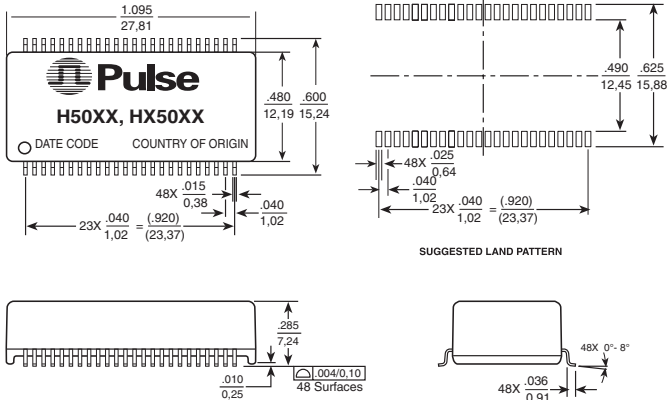
1000BASE-T MAGNETICS MODULES

Designed to Support 1:1 Turns Ratio Transceivers



Mechanicals (continued)

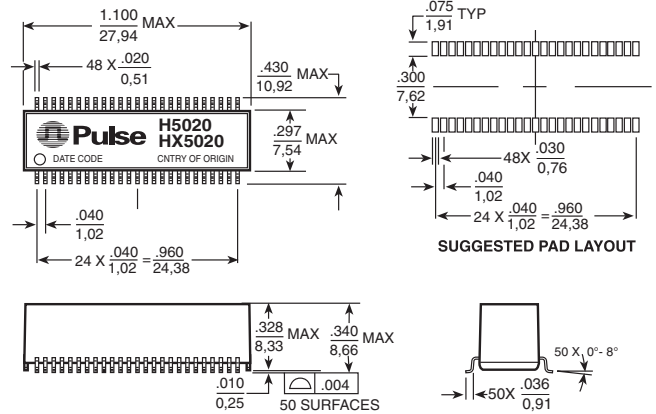
H5012, H5014, HX5014



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

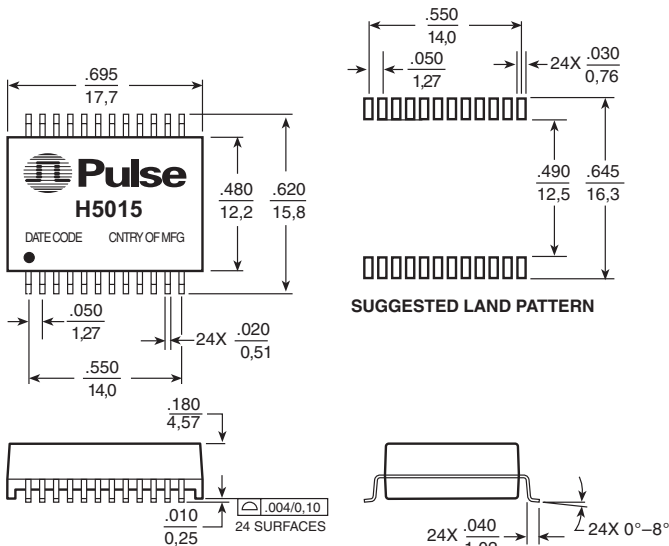


Weight 1.6 grams
Tape & Reel250/reel
Tube15/tube

Mechanicals (continued)

Schematics

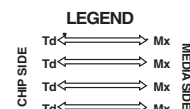
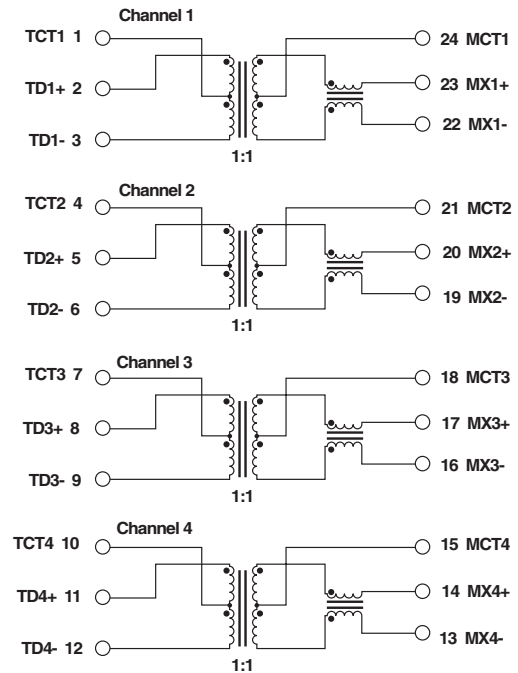
H5015



Weight 1.5 grams
Tape & Reel400/reel

Dimensions: $\frac{\text{Inches}}{\text{mm}}$
Unless otherwise specified, all tolerances are $\pm \frac{.005}{0,13}$

H5004, HX5004, H5009



1000BASE-T MAGNETICS MODULES

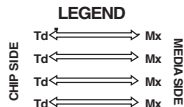
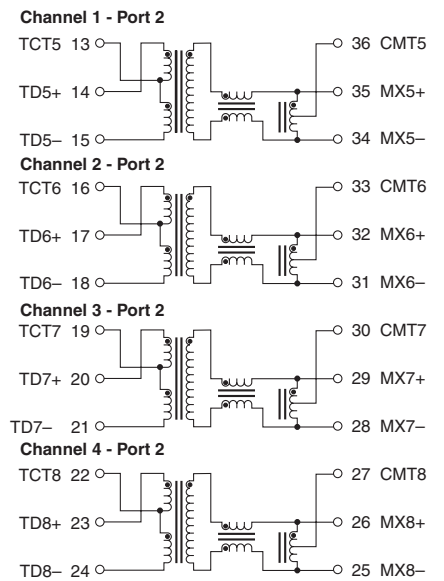
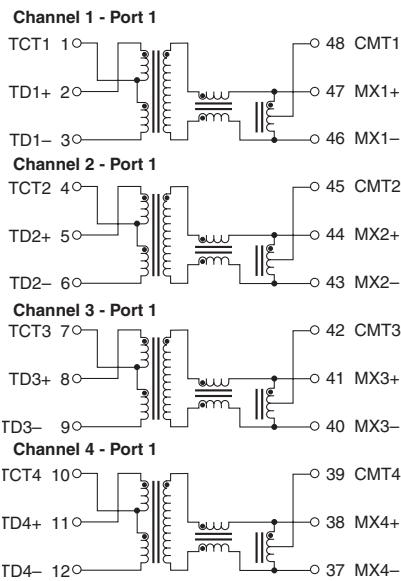
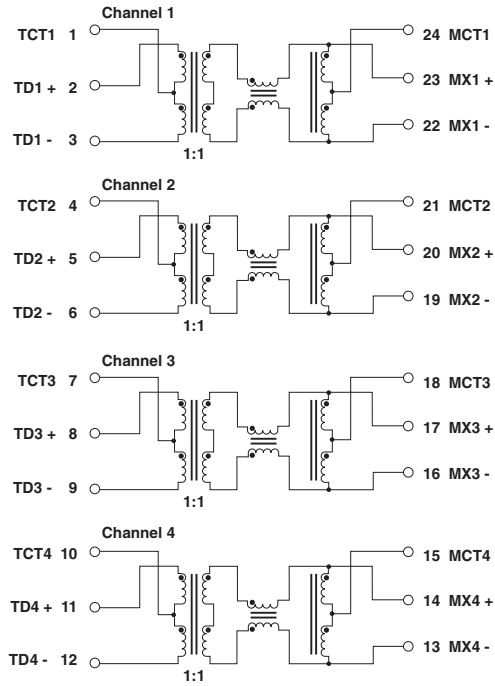
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Turns Ratio Transceivers



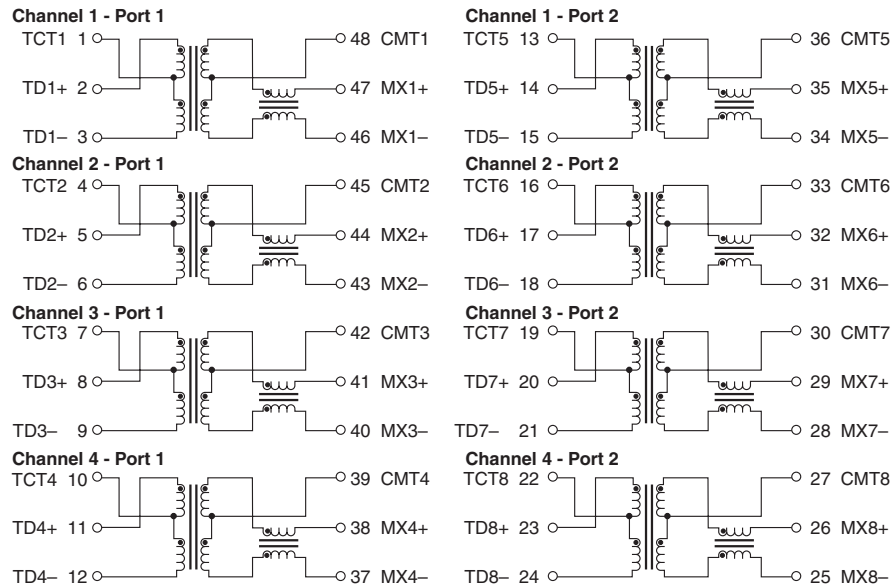
Schematics (continued)

H5007*, H5008, HX5008, H5015

H5012 *



H5014, HX5014



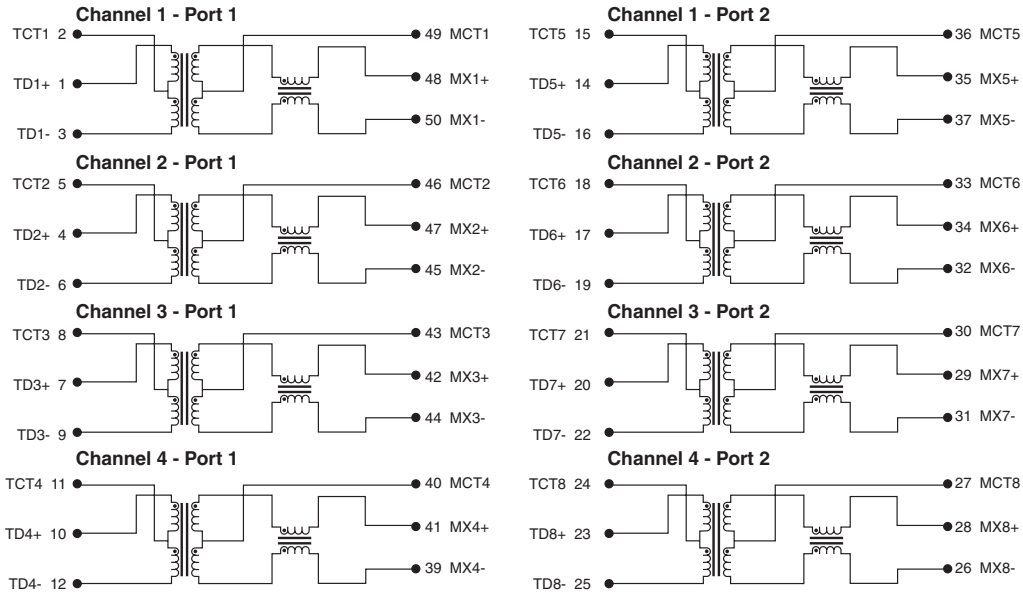
1000BASE-T MAGNETICS MODULES

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Turns Ratio Transceivers



Schematics (continued)

H5020, HX5020



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