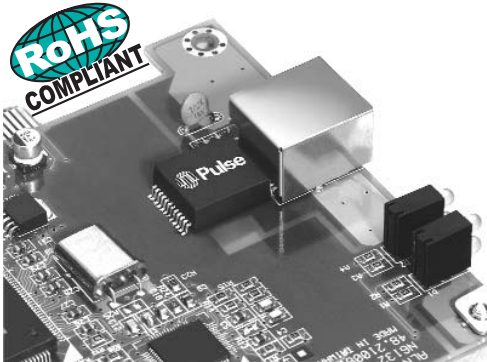


1000BASE-T MAGNETICS MODULES

Designed to Support 1:1 Turns Ratio Transceivers



- RoHS-5 peak reflow temperature rating 235°C
- RoHS-6 peak reflow temperature rating 245°C
- Meets IEEE 802.3 specification

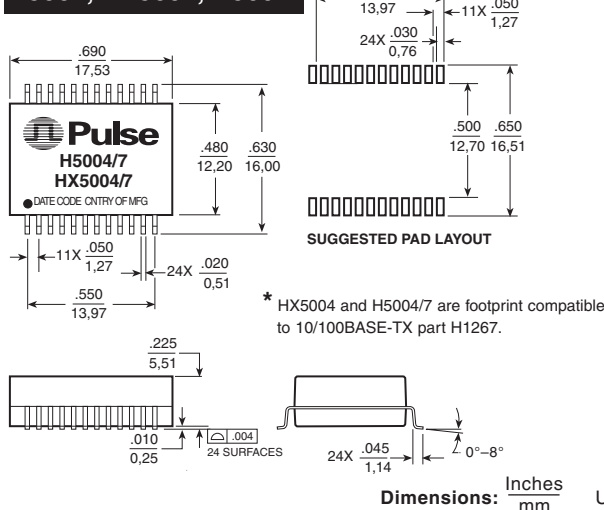
Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

RoHS-5 ⁴ Compliant Part Number	RoHS-6 ⁵ Compliant Part Number	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	H5004NL ^{3c}	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
HX5004 ¹	HX5004NL ^{1,3c}	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
H5007	H5007NL ^{3d}	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
H5008	H5008NL ^{3c}	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
HX5008 ¹	HX5008NL ^{3a}	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
H5009	H5009NL ^{3a}	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
H5012	H5012NL ^{3a}	2	1.4	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-43.5	-37.5	-33	1500
H5014	H5014NL ^{3a}	2	1.4	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-43.5	-37.5	-33	1500
HX5014 ¹	HX5014NL ^{1,3a}	2	1.4	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-43.5	-37.5	-33	1500
H5015	H5015NL ^{1,3a}	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
H5020	H5020NL ^{3c}	2	1	-18	-14.4	-13.1	-12	-10	-40	-35	-30	-40	-33	-28	1500
HX5020 ¹	HX5020NL ^{1,3a}	2	1	-18	-14.4	-13.1	-12	-10	-40	-35	-30	-40	-33	-28	1500

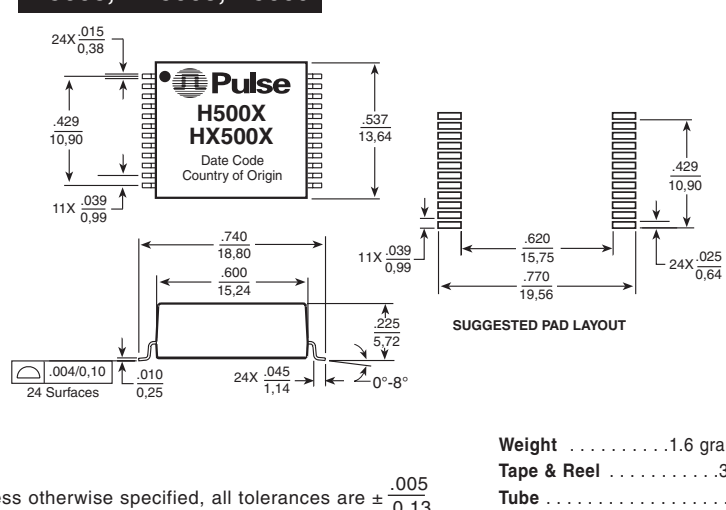
- HX: Extended temperature version -40°C to +85°C
- For Tape & Reel packaging, add a "T" suffix at the end of the part number, e.g. H5007T.
- MSL=Moisture Sensitivity Level: a=1 b=2 c=3 d=4
- RoHS-5: Product does not contain 5 out of the 6 banned substances specified in the RoHS directive (product contains lead in applications considered solder).
- RoHS-6: Product does not contain 5 out of the 6 banned substances specified in the RoHS directive. Some internal connections may contain lead in high-temperature solder (solder alloys containing more than 85% lead)

Mechanicals

H5004, HX5004, H5007*



H5008, HX5008, H5009



Designed to Support 1:1 Turns Ratio Transceivers



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

Weight1.6 grams
Tape & Reel250/reel
Tube15/tube

Mechanicals (continued)

Schematics

mm
Unless otherwise specified, all tolerances are $\pm \frac{.005}{0.13}$

LEGEND

CHIP SIDE	Td	↔	Mx	MEDIA SIDE
	Td	↔	Mx	
	Td	↔	Mx	
	Td	↔	Mx	

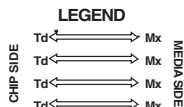
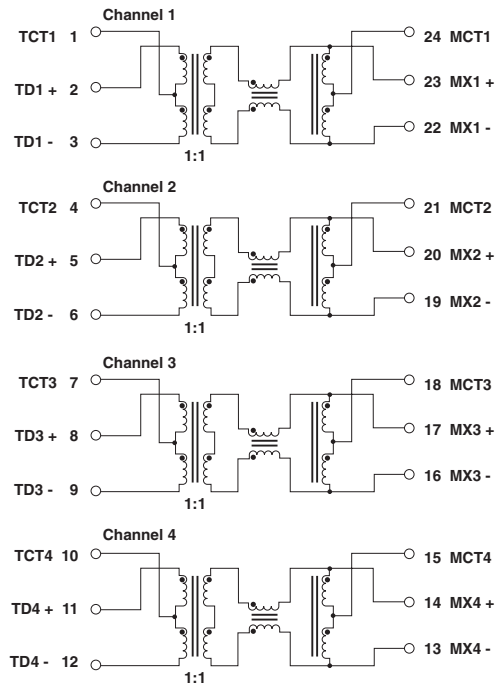
1000BASE-T MAGNETICS MODULES

Designed to Support 1:1
Turns Ratio Transceivers

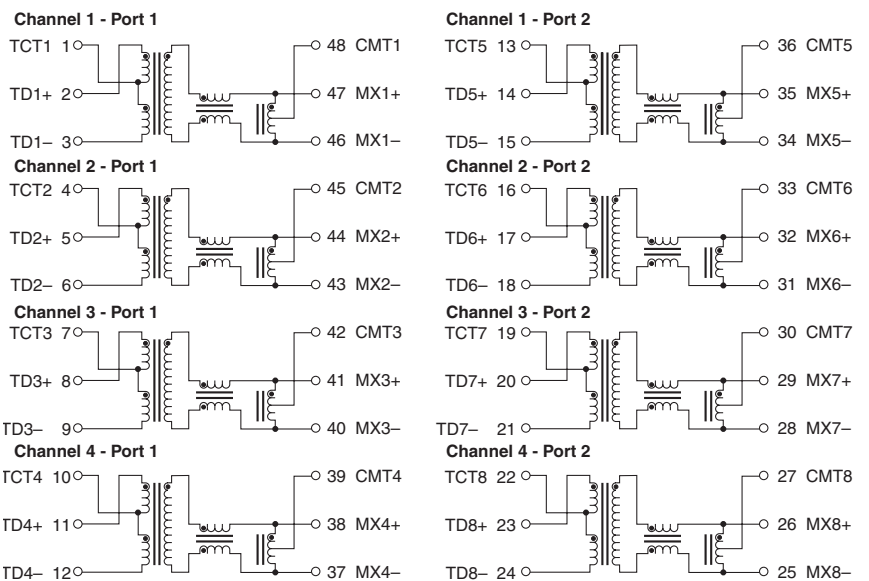


Schematics (continued)

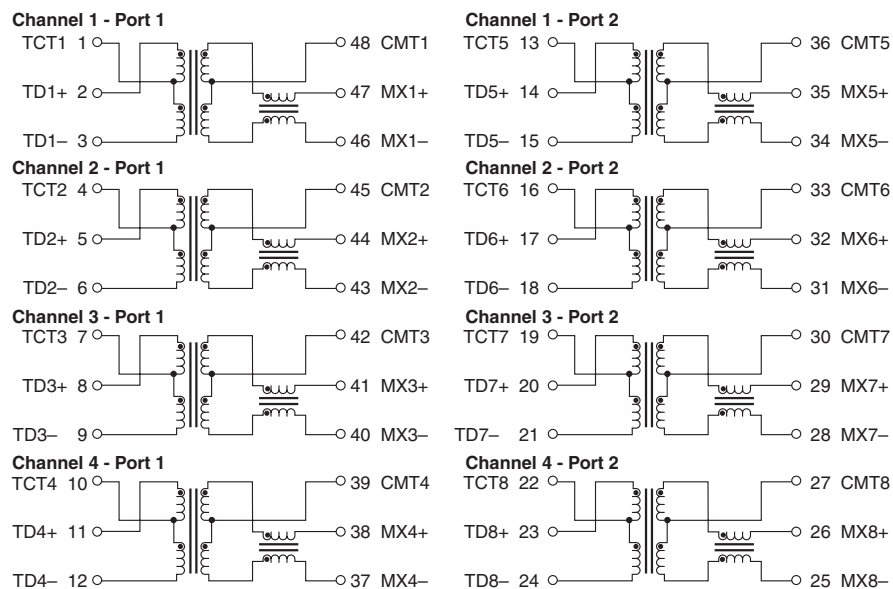
H5007*, H5008, HX5008, H5015



H5012 *



H5014, HX5014



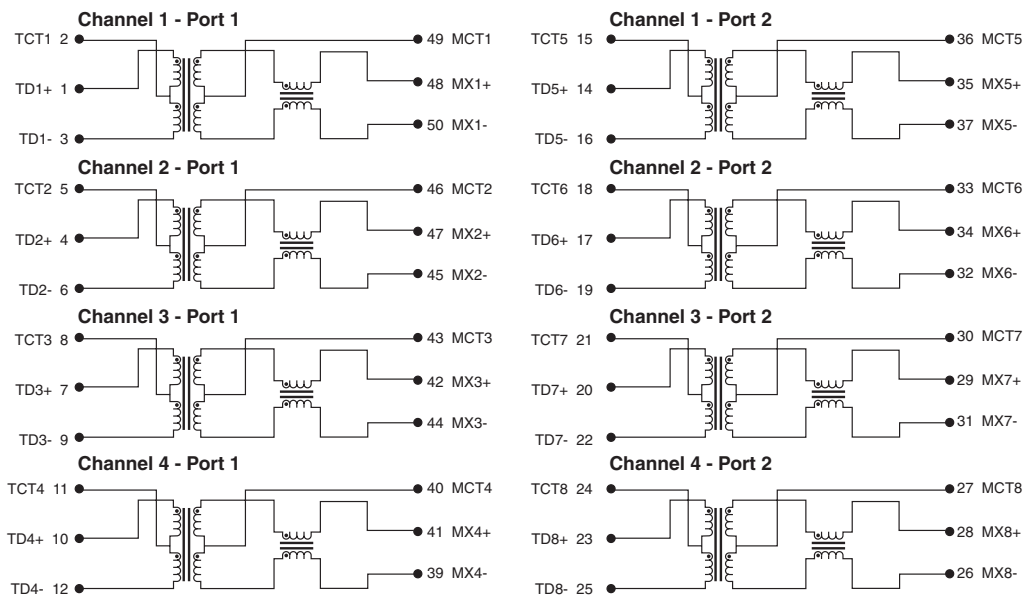
1000BASE-T MAGNETICS MODULES

Designed to Support 1:1
Turns Ratio Transceivers



Schematics (*continued*)

H5020, HX5020



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