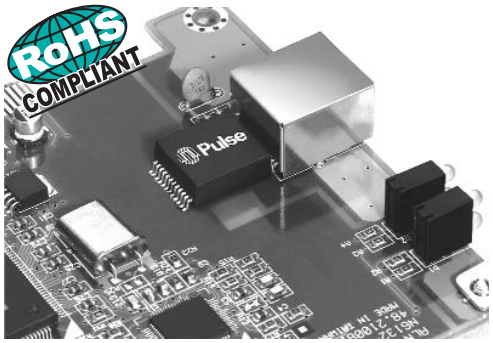
1000BASE-T MAGNETICS MODULES

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

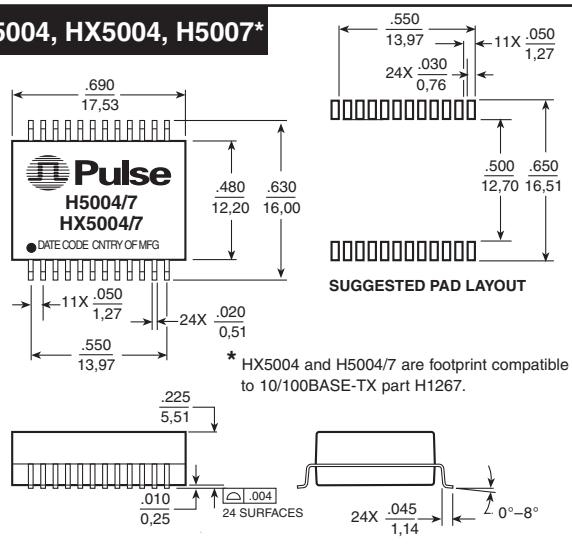
Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

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 (VRMS MIN)
			1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	100MHz	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz	
H5004 [3c]	H5004NL [3d]	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
HX5004 [1,3c]	HX5004NL [1,3d]	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
H5007 [3c]	H5007NL [3d]	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
H5008 [3a]	H5008NL [3a]	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
HX5008 [1,3a]	HX5008NL [1,3a]	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
H5009 [3a]	H5009NL [3a]	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
H5012 [3a]	H5012NL [3a]	2	1.4	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-43.5	-37.5	-33	1500
H5014 [3a]	H5014NL [3a]	2	1.4	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-43.5	-37.5	-33	1500
HX5014 [1,3a]	HX5014NL [1,3a]	2	1.4	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-43.5	-37.5	-33	1500
H5015 [3a]	H5015NL [3a]	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-43	-37	-33	1500
H5020 [3a]	H5020NL [3a]	2	1	-18	-14.4	-13.1	-12	-10	-40	-35	-30	-40	-33	-28	1500
HX5020 [1,3a]	HX5020NL [1,3a]	2	1	-18	-14.4	-13.1	-12	-10	-40	-35	-30	-40	-33	-28	1500
H5089 [3a]	H5089NL [3a]	2	1.4	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-43.5	-37.5	-33	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. **MSL**=Moisture Sensitivity Level: **a**=1 **b**=2 **c**=3 **d**=4
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).
5. **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)

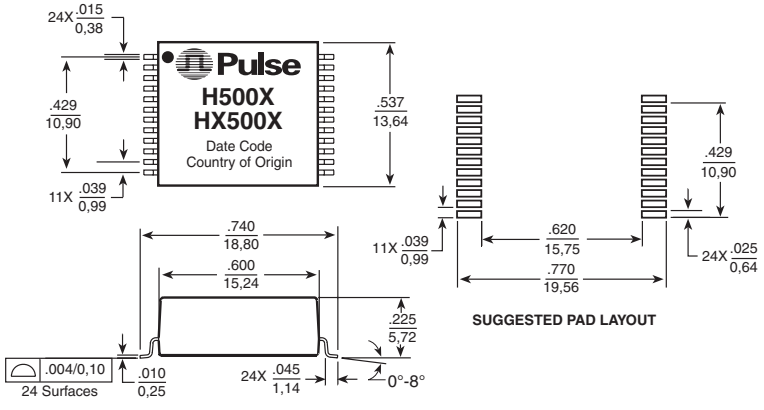
Mechanicals

H5004, HX5004, H5007*



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

H5008, HX5008, H5009



Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .010 / 0,25

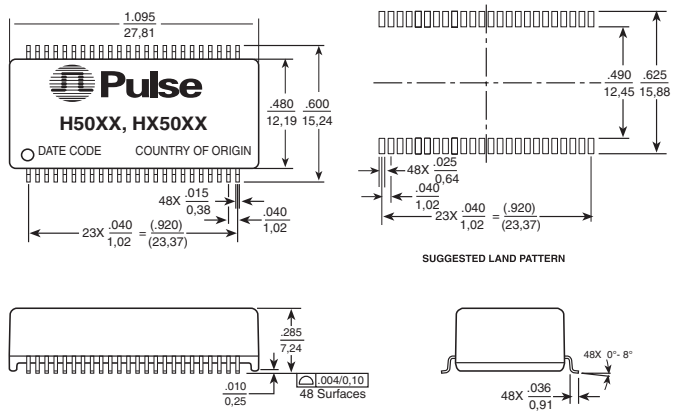
Weight . . . . . .1.6 grams
Tape & Reel 300
Tube 35

1000BASE-T MAGNETICS MODULES
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Pulse
A TECHNITROL COMPANY

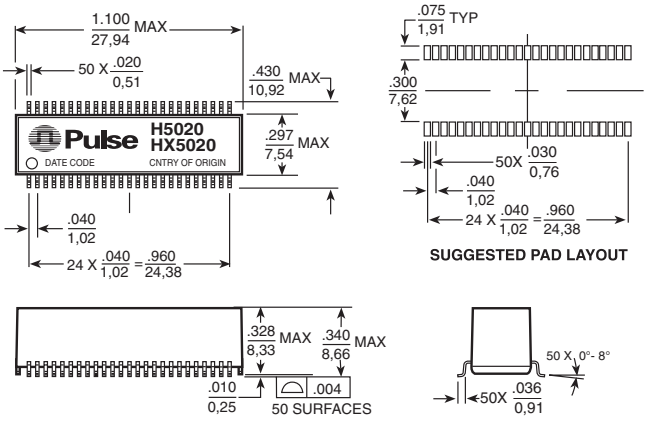
Mechanicals *(continued)*

H5012, H5014, HX5014, H5089



Weight . . . . . .4.0 grams
Tape & Reel 250/reel
Tube 15/tube

H5020, HX5020



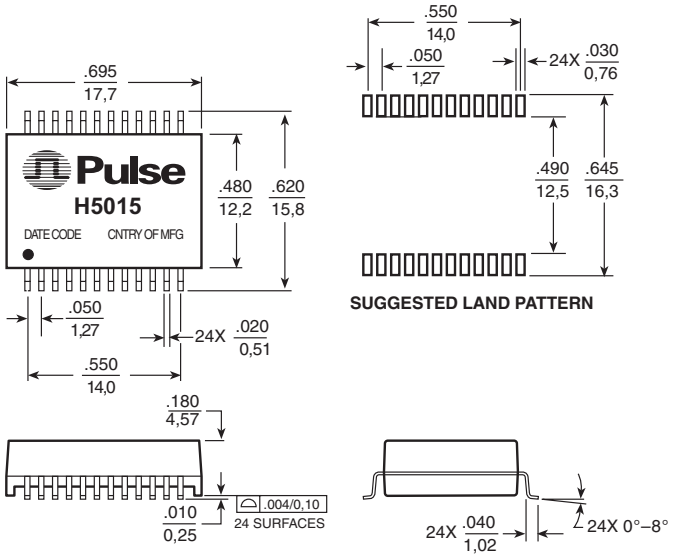
Weight . . . . . .1.6 grams
Tape & Reel 250/reel
Tube 15/tube

Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .010 / 0,25

Mechanicals *(continued)*

H5015



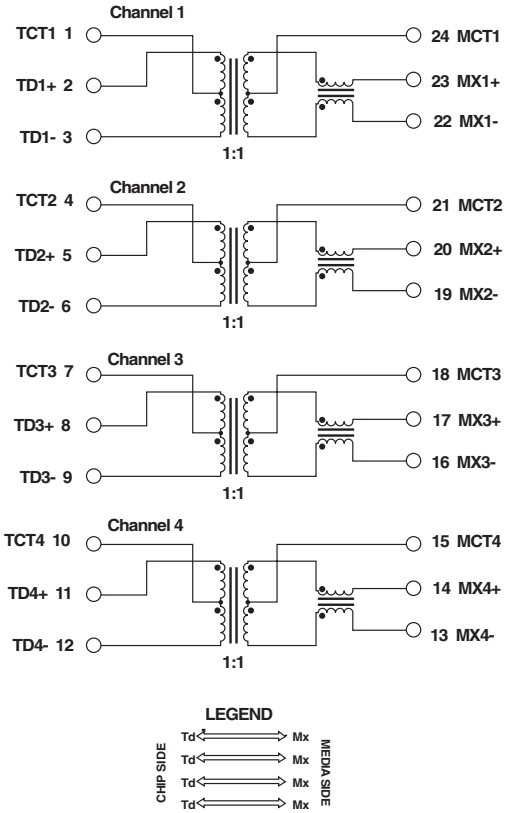
Weight . . . . . .1.5 grams
Tape & Reel 400/reel

Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .005 / 0,13

Schematics

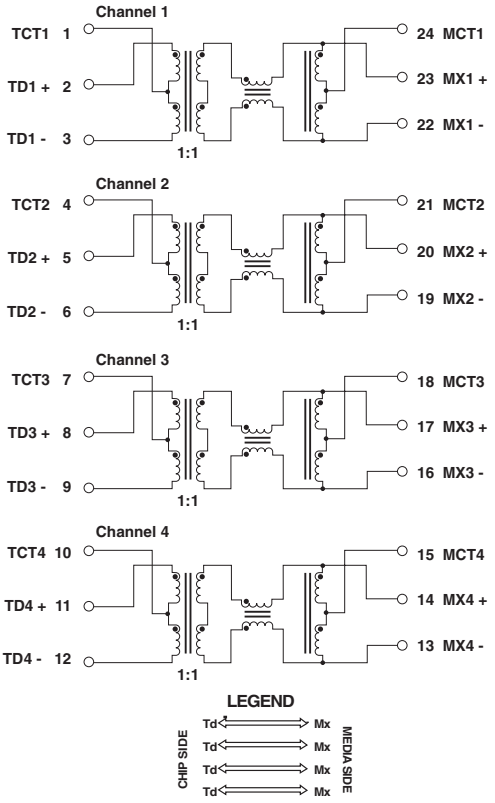
H5004, HX5004, H5009



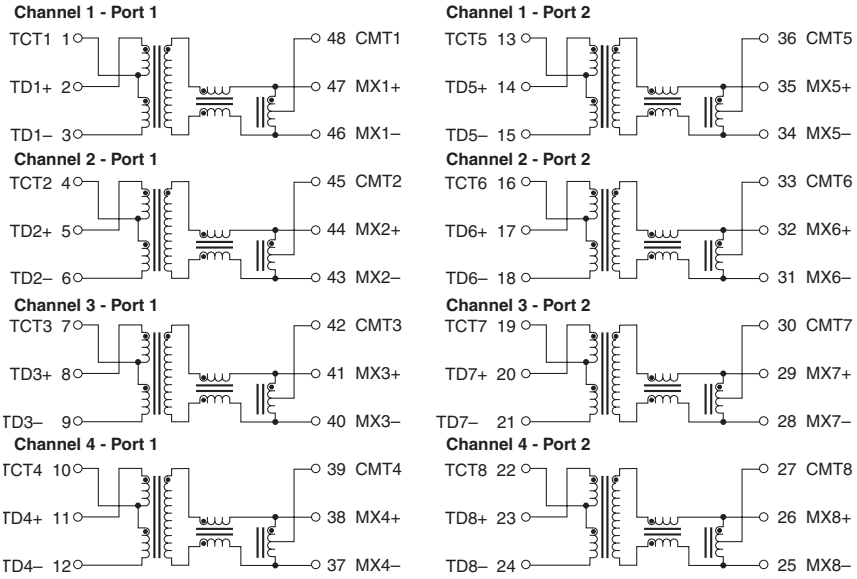
1000BASE-T MAGNETICS MODULES
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Schematics *(continued)*

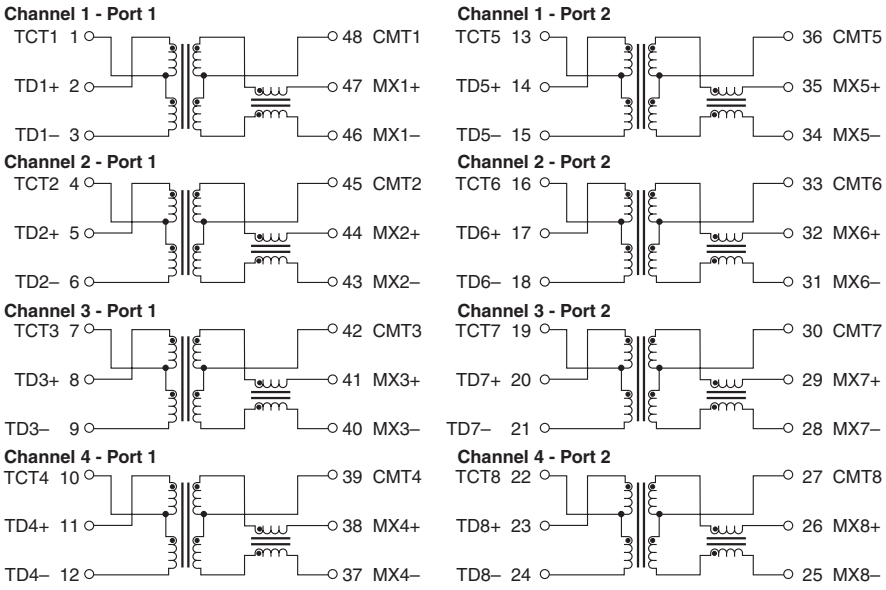
H5007*, H5008, HX5008, H5015



H5012, H5089

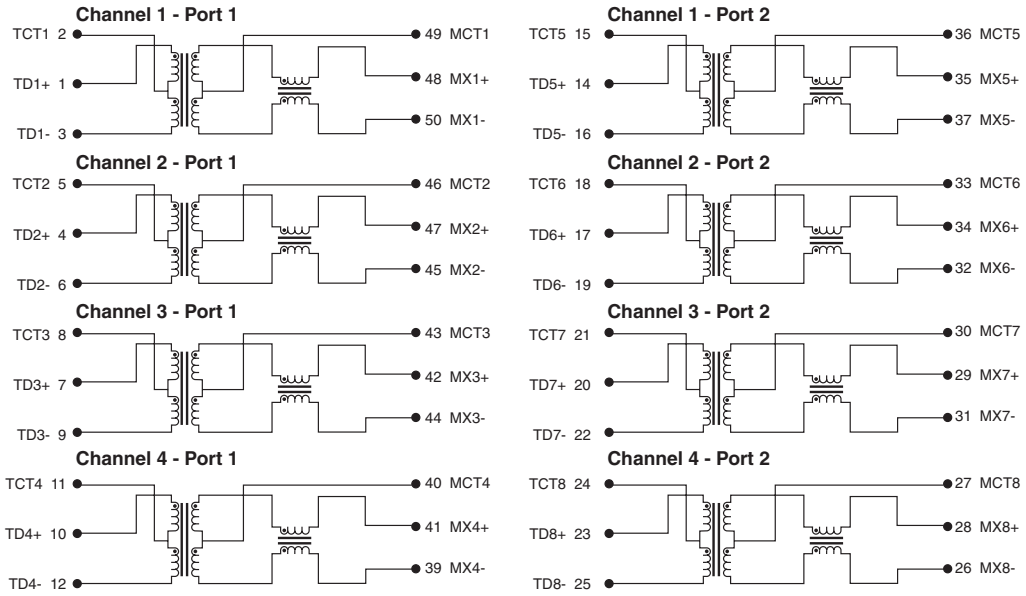


H5014, HX5014



Schematics *(continued)*

H5020, HX5020



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