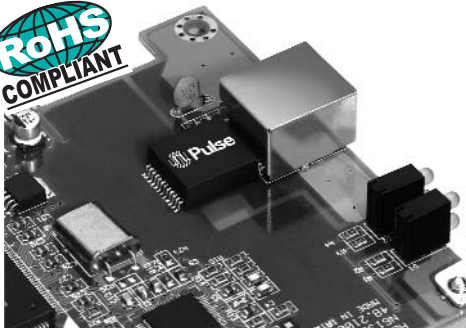


1000BASE-T MAGNETICS MODULES

Designed to Support 1:1 Turns

Ratio Transceivers



- For RoHS part add suffix **NL**⁷
- RoHS “NL” peak solder rating 260°C, non-RoHS peak solder rating 235°C
- Designed for long haul Gigabit Ethernet (10/100/1000BASE-T) applications
- H5008/9 designed to fit behind 1x1 RJ45 connector
- Cable interface for isolation and low common mode emissions
- Meets IEEE 802.3 specification

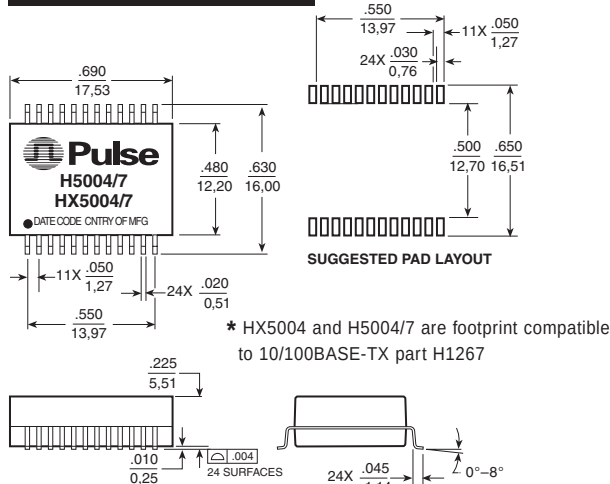
Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

Part 4 Number	RoHS 7	Number of Ports	Insertion Loss (dB MAX)	Return Loss (dB MIN)					Differential to Common Mode Rejection (dB MIN)			Crosstalk (dB MIN)			Hipot (Vrms MIN)
			1-100 MHz	1-30 MHz	40 MHz	50 MHz	60-80 MHz	100 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz	
H5004 ¹	5, 6c	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-45	-40	-35	1500
HX5004 ^{1, 2}	5, 6c	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-45	-40	-35	1500
H5007 ^{1, 3}	NL 6d	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-45	-40	-35	1500
H5008	5, 6c	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-45	-40	-35	1500
HX5008 ²	5, 6a	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-45	-40	-35	1500
H5009	5, 6a	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-45	-40	-35	1500
H5012 ³	NL 6a	2	1.4	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-43.5	-37.5	-33	1500
H5014	5, 6a	2	1.4	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-43.5	-37.5	-33	1500
HX5014 ²	5, 6a	2	1.4	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-43.5	-37.5	-33	1500
H5015	5, 6a	1	1	-18	-18	-16	-12	-10	-43	-37	-33	-45	-40	-35	1500
H5020	NL 6c	2	1	-18	-14.4	-13.1	-12	-10	-40	-35	-30	-40	-35	-30	1500
HX5020 ²	5, 6c	2	1	-18	-14.4	-13.1	-12	-10	-40	-35	-30	-40	-35	-30	1500

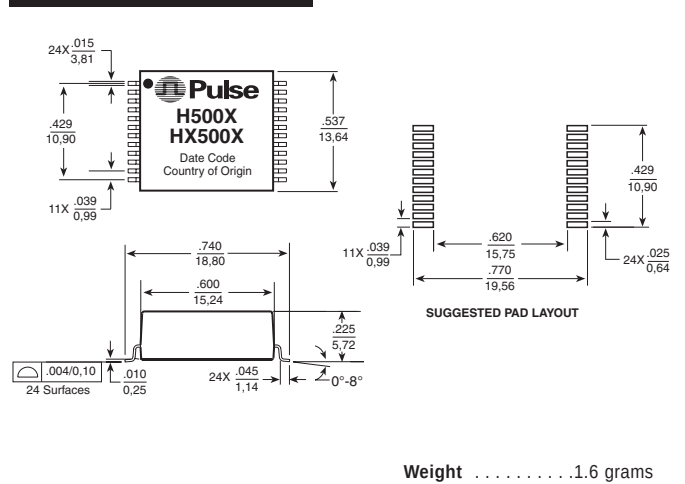
- Footprint compatible product to H1267
- HX: Extended temperature version -40°C to +85°C
- Extended temperature part not available, select HX5004 or HX5014
- For Tape & Reel packaging, add a “T” suffix at the end of the part number when ordering. e.g. H5007T
- Contact Pulse for RoHS compliant part availability
- MSL=Moisture Sensitivity Level a=1 b=2 c=3 d=4
- Add suffix **NL** for RoHS compliant parts, e.g. H5007 changes to H5007NL or H5007NLT (for Tape and Reel)

Mechanicals

H5004, HX5004, H5007*



H5008, HX5008, H5009



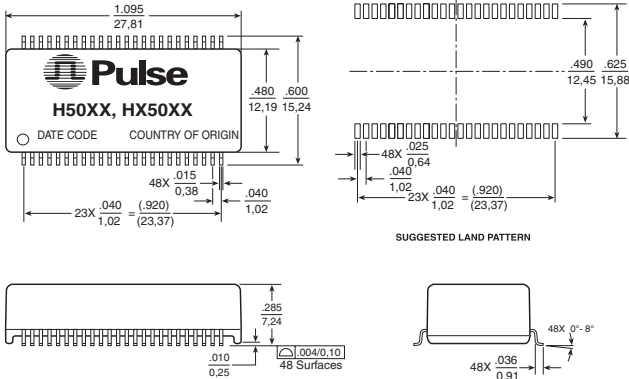
1000BASE-T MAGNETICS MODULES

Designed to Support 1:1 Turns Ratio Transceivers



Mechanicals (continued)

H5012, H5014, HX5014

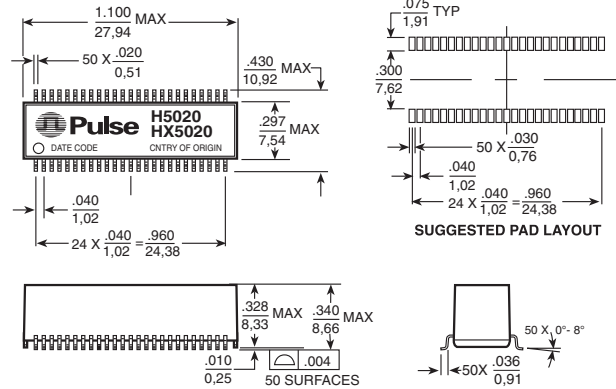


Weight 4.0 grams
Tape & Reel250/reel
Tube15/tube

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

Unless otherwise specified, all tolerances are $\pm \frac{.010}{0.25}$

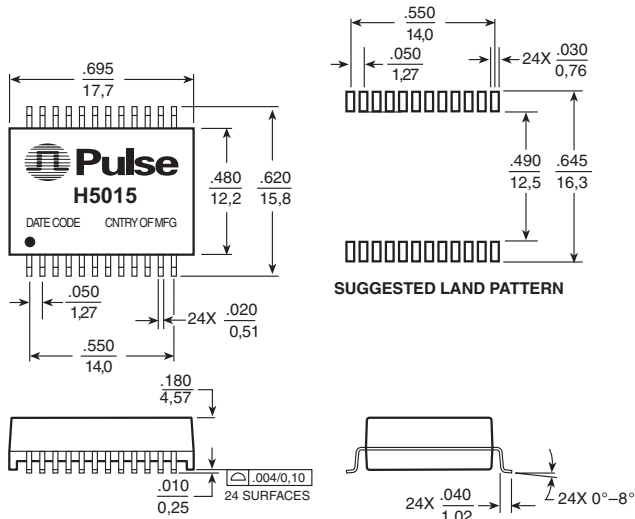
H5020, HX5020



Weight 1.6 grams
Tape & Reel250/reel
Tube15/tube

Mechanicals (continued)

H5015



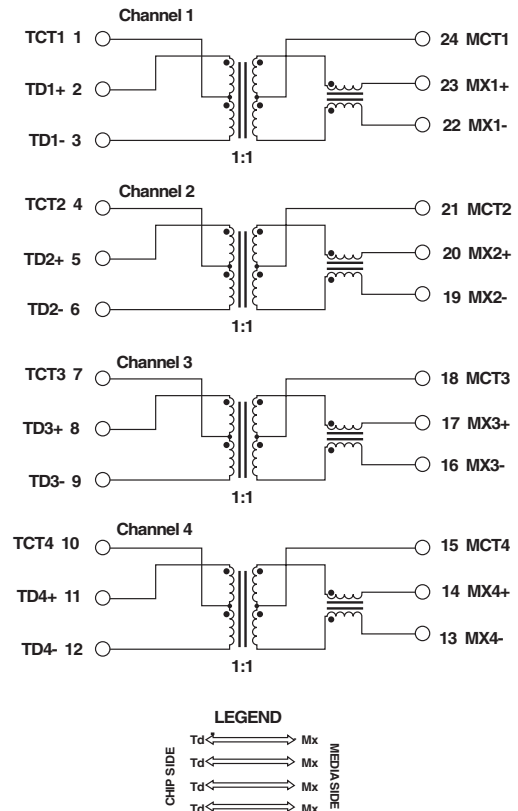
Weight 1.5 grams
Tape & Reel400/reel

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

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

Schematics

H5004, HX5004, H5009



LEGEND

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

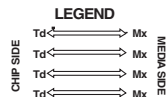
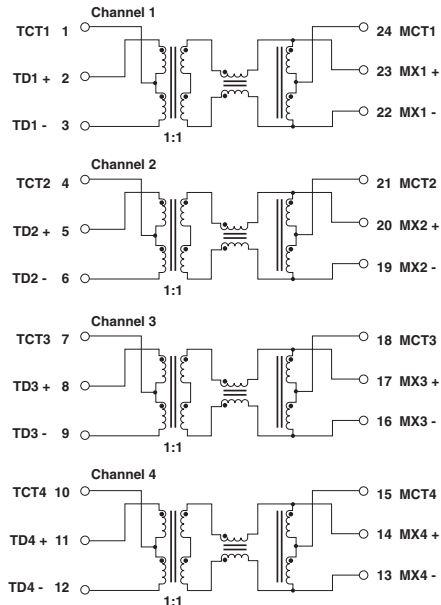
1000BASE-T MAGNETICS MODULES

Designed to Support 1:1 Turns Ratio Transceivers



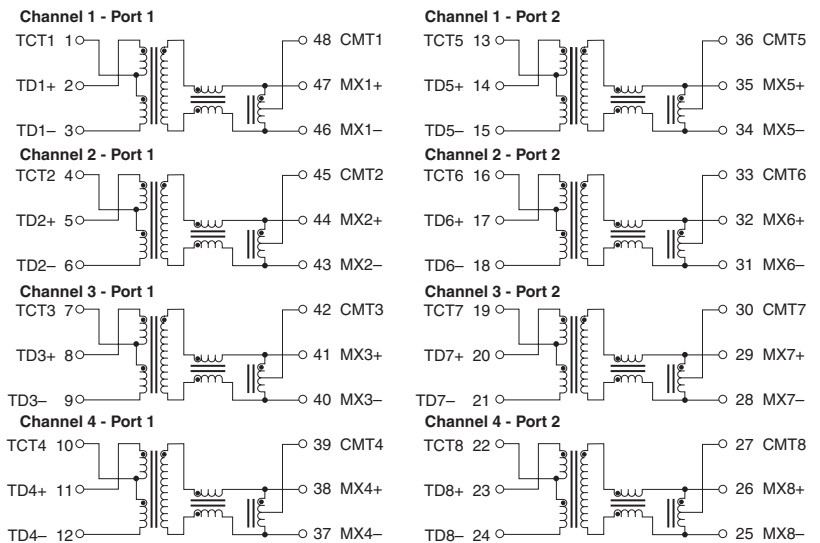
Schematics (continued)

H5007*, H5008, HX5008, H5015



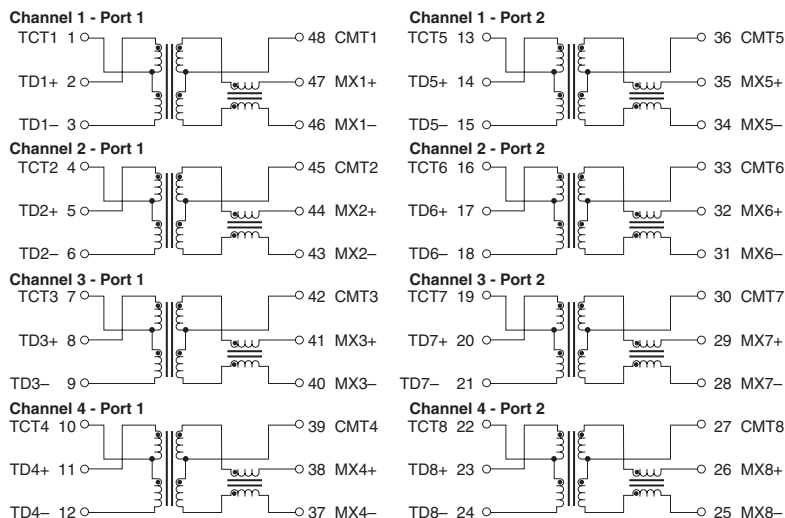
* Extended temperature part for H5007 (HX5007) is not available. Select HX5004.

H5012 *



* Extended temperature part for H5012 is not available. Select HX5014.

H5014, HX5014



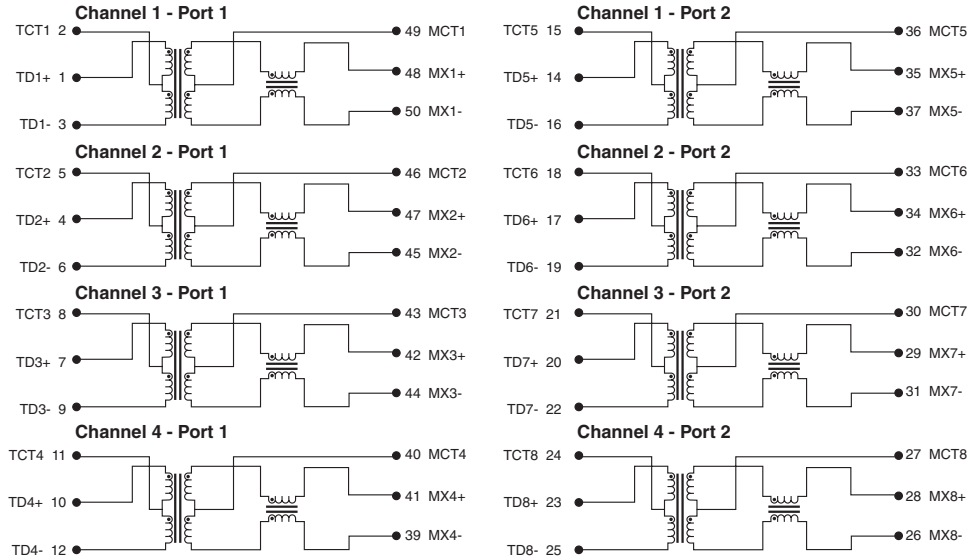
1000BASE-T MAGNETICS MODULES

Designed to Support 1:1 Turns
Ratio Transceivers



Schematics (continued)

H5020, HX5020



For More Information:

UNITED STATES (Worldwide)

12220 World Trade Drive
San Diego, CA 92128
U.S.A.
<http://www.pulseeng.com>
TEL: 858 674 8100
FAX: 858 674 8262

UNITED KINGDOM (Northern Europe)

3 Huxley Road
Surrey Research Park
Guildford, Surrey GU2 5RE
United Kingdom
TEL: 44 1483 401700
FAX: 44 1483 401701

FRANCE (Southern Europe)

Zone Industrielle
F-39270
Orgelet
France
TEL: 33 3 84 35 04 04
FAX: 33 3 84 25 46 41

SINGAPORE (Southern Asia)

150 Kampong Ampat
#07-01/02
KA Centre
Singapore 368324
TEL: 65 6287 8998
FAX: 65 6280 0080

TAIWAN, R.O.C. (Northern Asia)

3F-4, No. 81, Sec. 1
HsinTai Wu Road
Hsi-Chih, Taipei Hsien
Taiwan, R.O.C.
Tel: 886 2 2698 0228
FAX: 886 2 2698 0948

HONG KONG (China/Hong Kong)

Unit 11, 11/F
Wah Lai Industrial Centre
10-14 Kwei Tei Street,
Fotan, Shatin, Hong Kong
TEL: 852 2788 6588
FAX: 852 2776 1055

DISTRIBUTOR

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners.

© Copyright, 2005. Pulse Engineering, Inc. All right reserved.