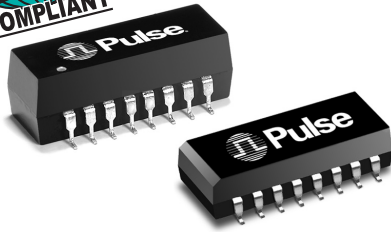






10/100 BASE-T SINGLE PORT TRANSFORMER MODULES

With 1:1 Transmit Turns Ratios



-  RoHS-5 peak reflow temperature rating: 235°C
-  RoHS-6 peak reflow temperature rating: 245°C
-  Compatible with Broadcom, Intel, Micrel, National Semiconductor, ICS, and TDK Transceivers
-  Meets IEEE 802.3 specification

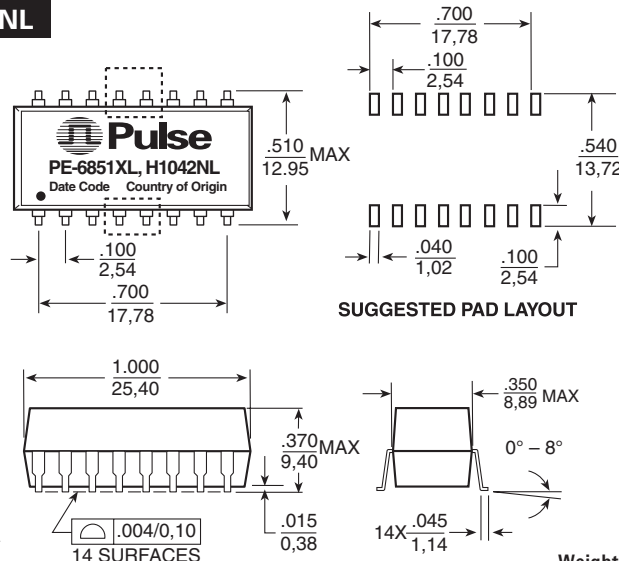
Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

RoHS ⁶ Compliant Part Number	RoHS ⁵ Compliant Part Number	Insertion Loss (dB MAX)	Return Loss (dB MIN @ 100 Ω)				Differential to Common Mode Rejection (dB MIN)			Crosstalk (dB TYP)			Hipot (Vrms MIN)
			0.1-100 MHz	1-30 MHz	40 MHz	50 MHz	60-80 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	
H1012NL ^{4d}	H1012	-1.0	-20	-20	-18	-14	-42	-36	-33	-50	-40	-40	1500
H1019NL ^{4c}	H1019	-1.0	-20	-18	-18	-14	-45	-40	-35	-45	-40	-35	1500
H1042NL ^{4c}	—	-1.0	-16	-13.5	-11.5	-10	-45	-40	-35	-40	-38	-35	1500
H1086NL ^{4c}	H1086 ¹	-1.0	-22	-20	-18	-12	-45	-40	-35	-50	-40	-40	1500
H1089NL ^{4c}	H1089	-1.0	-22	-20	-18	-12	-42	-38	-32	-50	-40	-40	1500
H1117NL ^{4d}	H1117	-1.0	-22	-20	-18	-12	-45	-40	-35	-50	-40	-40	1500
H1138NL ^{4a}	H1138	-0.8	-18	-16	-14	-12	42	-37	-33	-50	-40	-40	1500
HX1148NL ^{2, 4d}	HX1148 ²	-1.5	-18	-13.5	-11.5	-10	-42	-37	-33	-50	-40	-40	1500
HX1178NL ^{2, 4d}	HX1178 ²	-1.5	-18	-13.5	-11.5	-10	-42	-37	-33	-50	-40	-40	1500
PE-68515LNL ^{4d}	PE-68515L	-1.0	-18	-18	-16	-12	-50	-45	-40	-55	-50	-50	1500
PE-68517LNL ^{4d}	PE-68517L	-1.0	-18	-16	-15	-12	-45	-40	-35	-50	-40	-40	1500
H1338NL ^{4a}	H1338	-1.1	-18	-16	-14	-12	-42	-37	-35	-40	-40	-35	1800

- Rise time optimized for National's DP83843.
- Operating temperature: -40°+ 85°C.
- When ordering Tape & Reel packaging, add a "T" suffix to the end of the part number, e.g. H1012T
- 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).

Mechanics

PE-68515L, PE-68517L, H1042NL



NOTE: The PE-68515L pins 4 and 13 are removed.
The PE-68517L pins 5 and 12 are removed.

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

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

Weight 3.5 grams
Tube 20/tube
Tape & Reel 160/reel

USA 858 674 8100 • Germany 49 7032 7806 0 • Singapore 65 6287 8998 • Shanghai 86 21 32181071 • China 86 755 33966678 • Taiwan 886 3 4643715

10/100 BASE-T SINGLE PORT TRANSFORMER MODULES

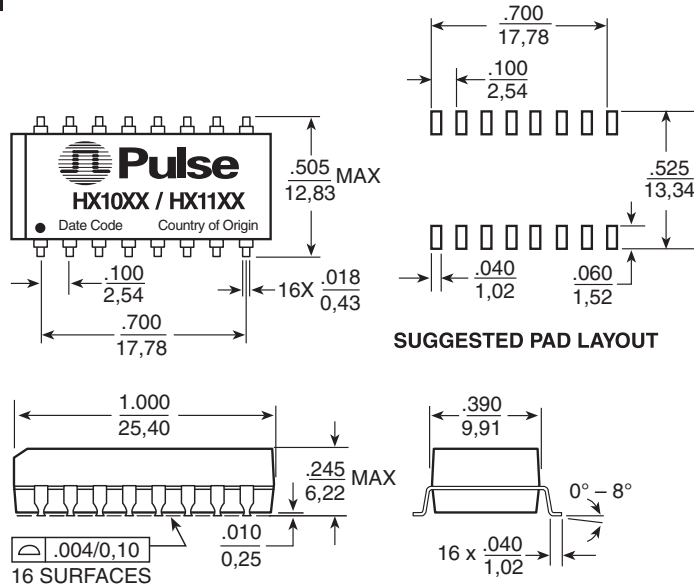
With 1:1 Transmit Turns Ratios



Mechanicals (continued)

H1012, H1019, H1086, H1089, H1117,

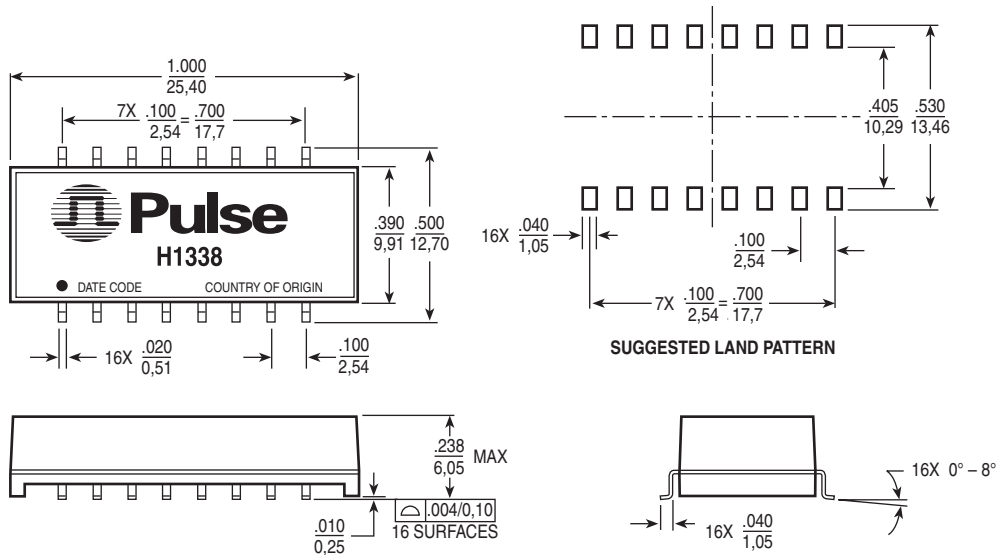
H1138, HX1148, HX1178



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

Weight 3.0 grams
 Tube 20/tube
 Tape & Reel 300/reel

H1338



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

Weight 3.0 grams
 Tube 20/tube
 Tape & Reel 300/reel

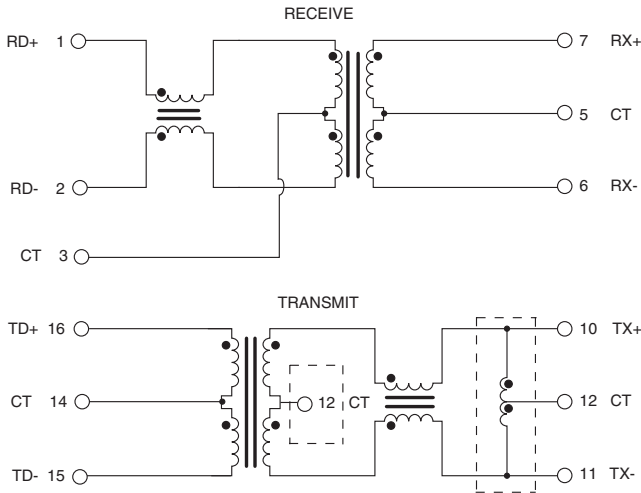
10/100 BASE-T SINGLE PORT TRANSFORMER MODULES

With 1:1 Transmit Turns Ratios



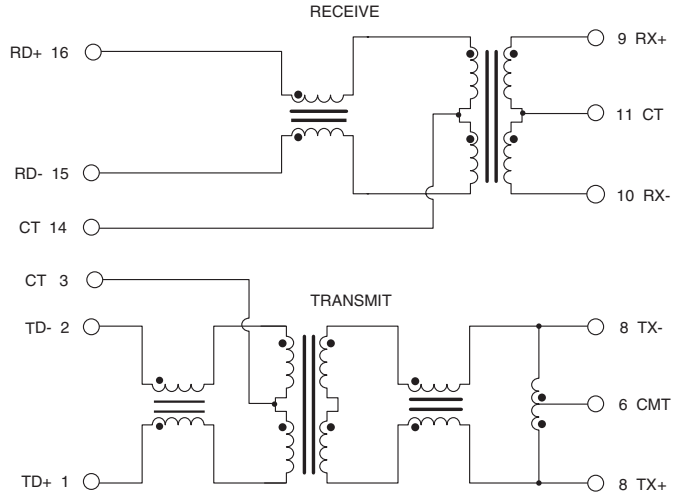
Schematics

PE-68515L, H1012, H1086, H1089, HX1148, H1138

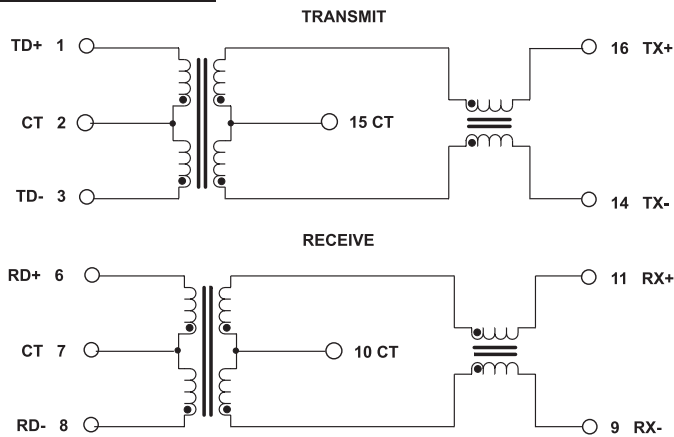


Center-tapped inductor not included in H1089. So, pin 12 connects to the transformer center tap.

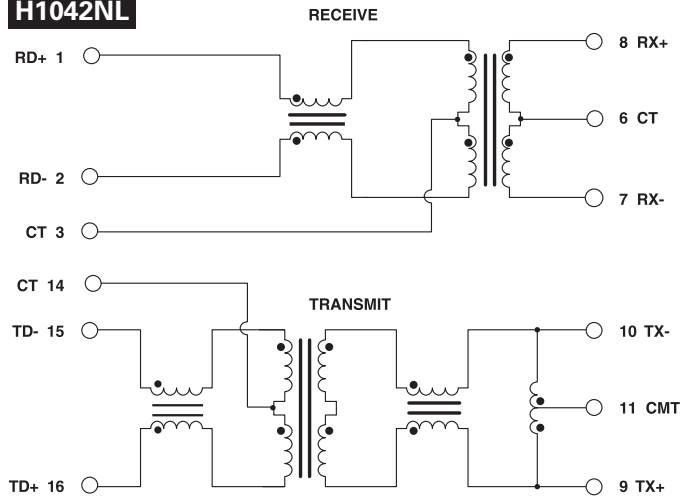
PE-68517L, H1019



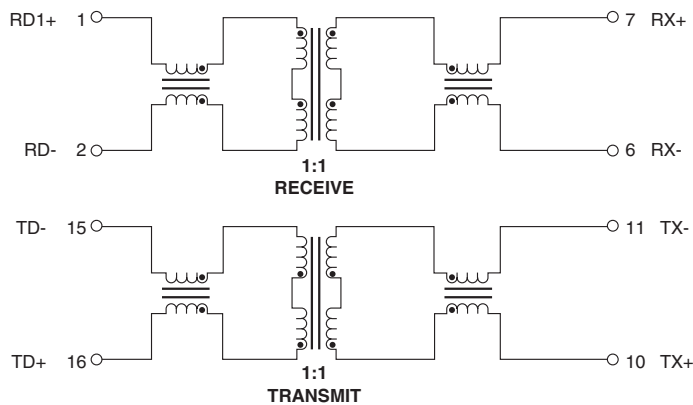
H1117, HX1178



H1042NL



H1338



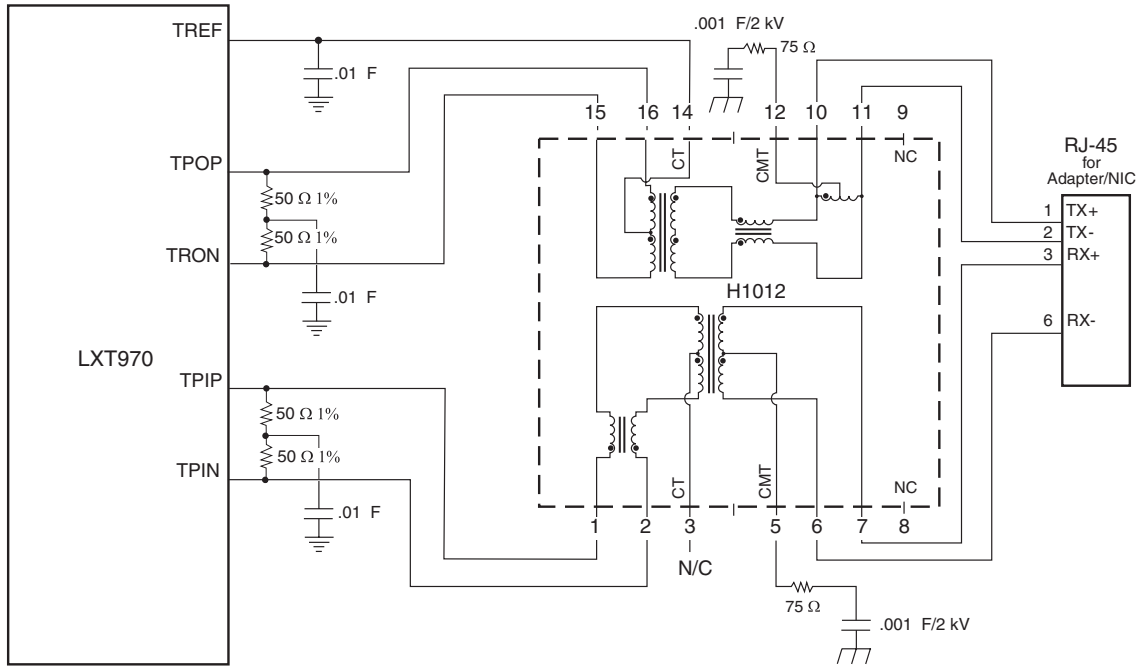
10/100 BASE-T SINGLE PORT TRANSFORMER MODULES

With 1:1 Transmit Turns Ratios

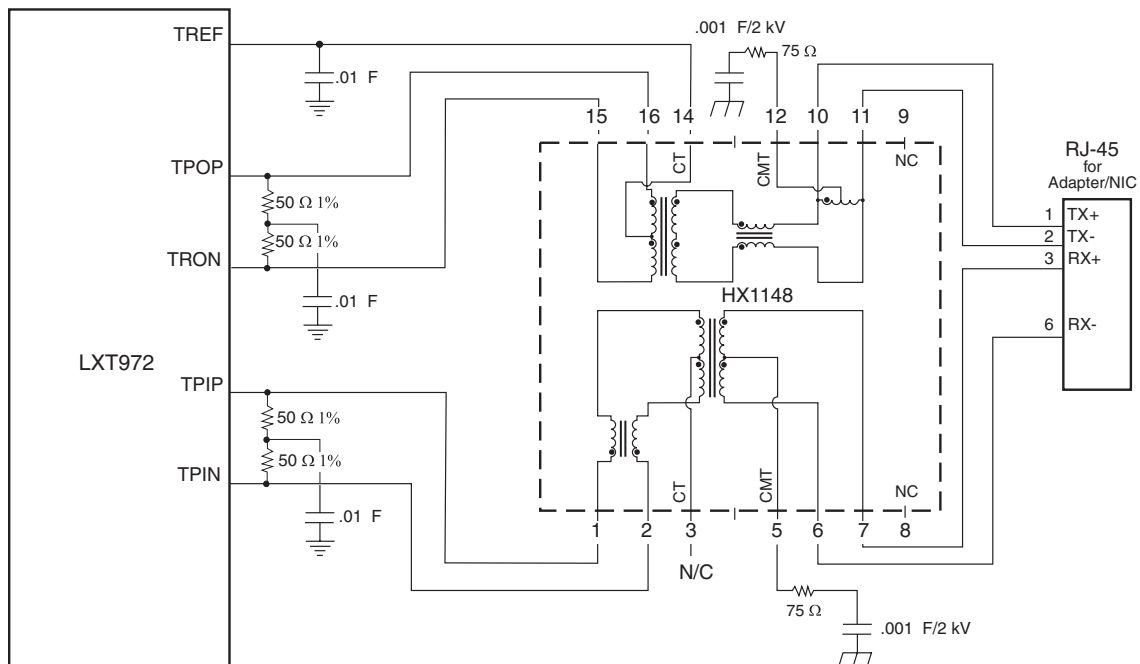


Typical Application Circuits

H1012, H1138



HX1148



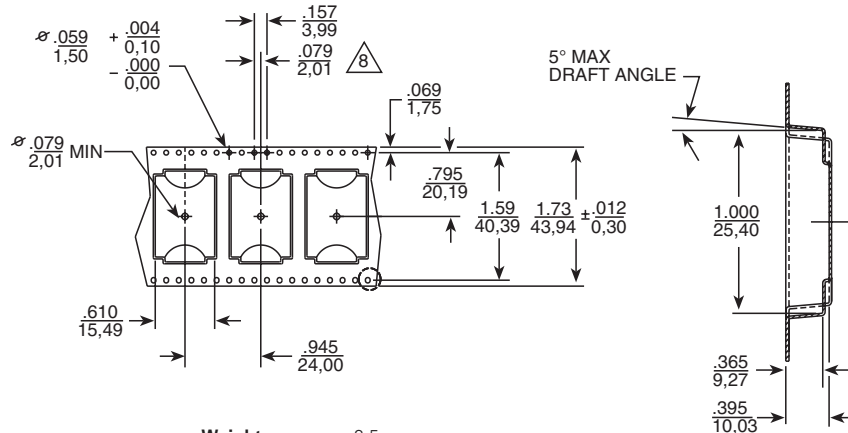
10/100 BASE-T SINGLE PORT TRANSFORMER MODULES

With 1:1 Transmit Turns Ratios



Tape & Reel Specifications

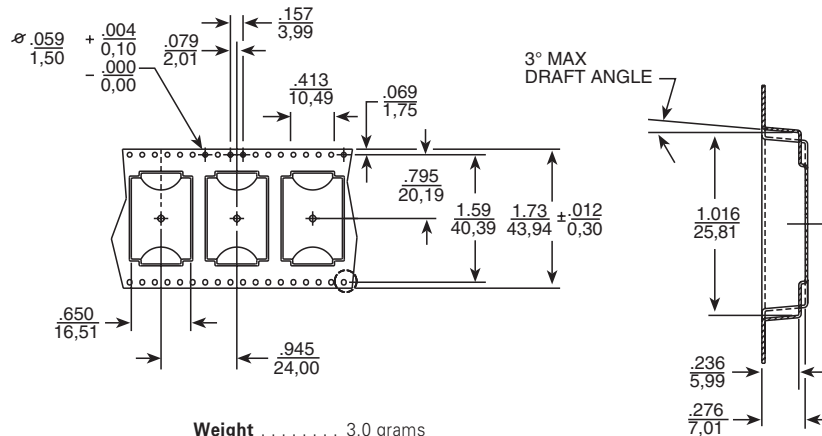
PE-68515L, PE-68517L, H1042NL



Weight 3.5 grams
 Tube 20/tube
 Tape & Reel 160/reel

H1012, H1019, H1086, H1089, H1117,

H1138, H1338, HX1148, HX1178



Weight 3.0 grams
 Tube 20/tube
 Tape & Reel 300/reel

For More Information:

Pulse Worldwide Headquarters	Pulse Europe	Pulse China Headquarters	Pulse North China	Pulse South Asia	Pulse North Asia
12220 World Trade Dr. San Diego, CA 92128 U.S.A.	Einsteinstrasse 1 D-71083 Herrenberg Germany	B402, Shenzhen Academy of Aerospace Technology Bldg. 10th Kejinan Rd. High-Tech Zone Nanshan District Shenzhen, PR China 518057	Room 1503 XinYin Building No. 888 YiShan Rd. Shanghai 200233 China	135 Joo Seng Rd. #03-02 PM Industrial Bldg. Singapore 368363	No. 26, Kao Ching Rd. Yang Mei Chen Taoyuan Hsien Taiwan R. O. C.
Tel: 858 674 8100 Fax: 858 674 8262	Tel: 49 7032 7806 0 Fax: 49 7032 7806 135	TEL: 86 755 33966678 FAX: 86 755 33966700	Tel: 86 21 54643211/2 Fax: 86 21 54643210	TEL: 65 6287 8998 FAX: 65 6280 0080	Tel: 886 3 4643715 Fax: 886 3 4641911

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, 2008. Pulse Engineering, Inc. All rights reserved.

单击下面可查看定价，库存，交付和生命周期等信息

[>>Pulse\(普思\)](#)