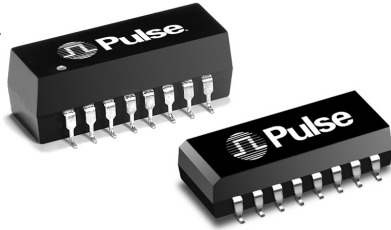


10/100 BASE-T SINGLE PORT TRANSFORMER MODULES

With 1:1 Transmit Turns Ratios



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

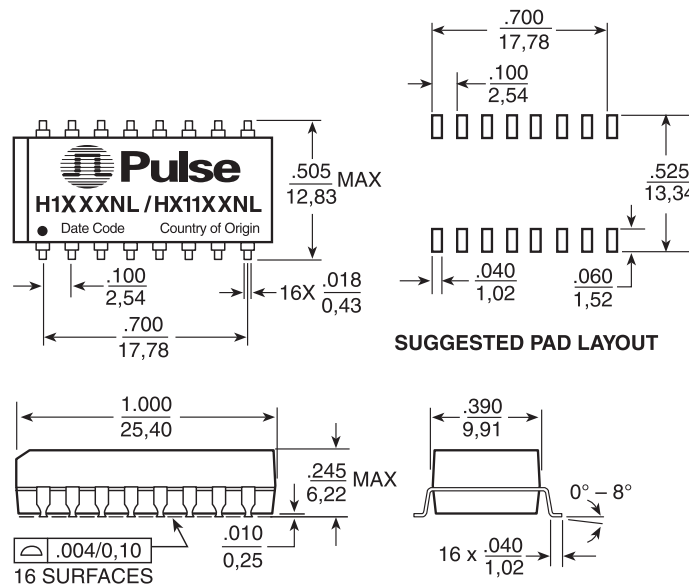
Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

RoHS Compliant Part Number	Insertion Loss (dB MAX)	Return Loss (dB MIN @ 100 Ω)				Differential to Common Mode Rejection (dB MIN)			Crosstalk (dB TYP)			Hipot (V _{rms} 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}	-1.0	-20	-20	-18	-14	-42	-36	-33	-50	-40	-40	1500
H1086NL ^{4c}	-1.0	-22	-20	-18	-12	-45	-40	-35	-50	-40	-40	1500
H1138NL ^{4a}	-0.8	-18	-16	-14	-12	42	-37	-33	-50	-40	-40	1500
HX1148NL ^{1,4d}	-1.5	-18	-13.5	-11.5	-10	-42	-37	-33	-50	-40	-40	1500

1. HX = Operating temperature: -40°+ 85°C.
2. Unless specified, operating temperature is 0° to 70°C.
3. When ordering Tape & Reel packaging, add a "T" suffix to the end of the part number, e.g. H1012NLT
4. MSL = Moisture Sensitivity Level: a = 1, b = 2, c = 3, d = 4.

Mechanicals

H1012NL, H1086NL, H1138NL, HX1148NL



Weight 3.0 grams

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

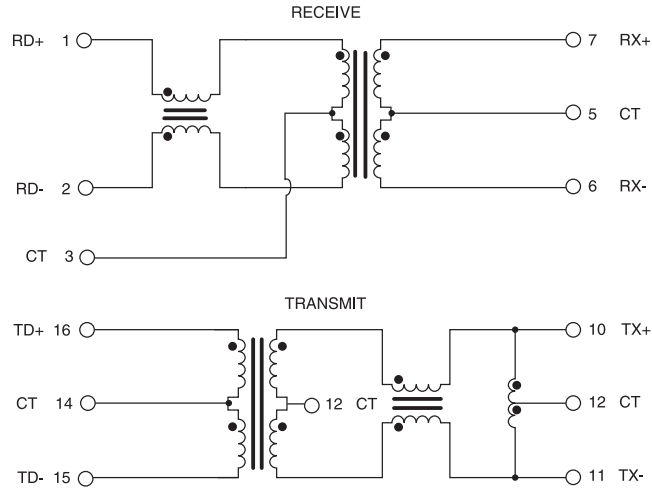
10/100 BASE-T SINGLE PORT TRANSFORMER MODULES

With 1:1 Transmit Turns Ratios



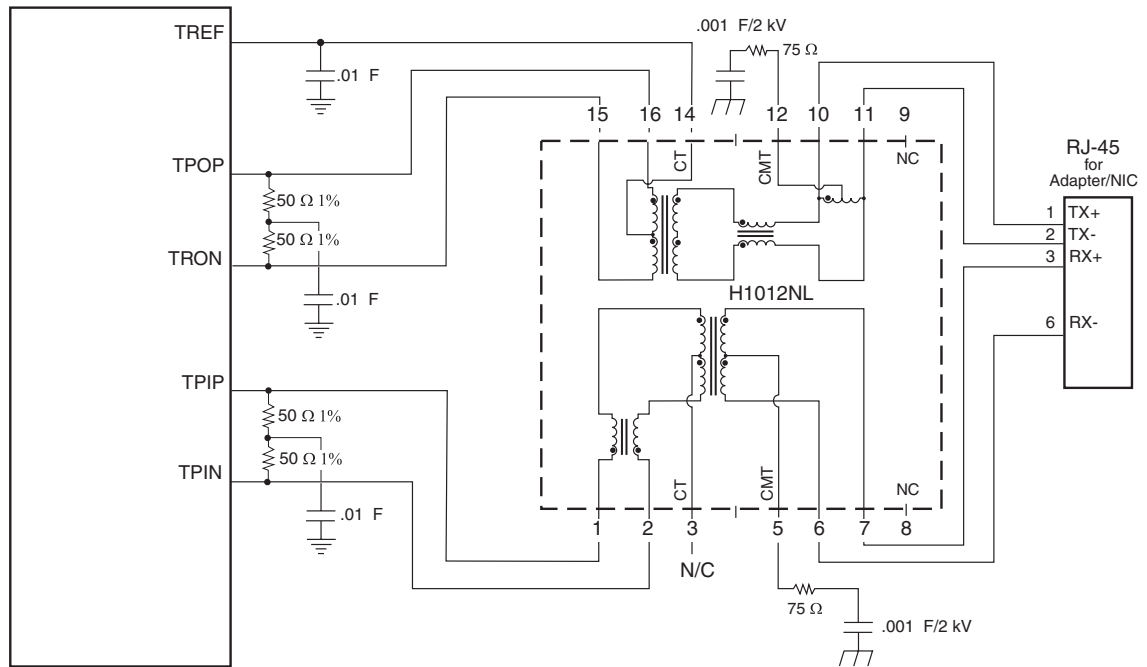
Schematics

H1012NL, H1086NL, HX1148NL, H1138NL



Typical Application Circuits

H1012NL, H1138NL, HX1148NL, H1138NL



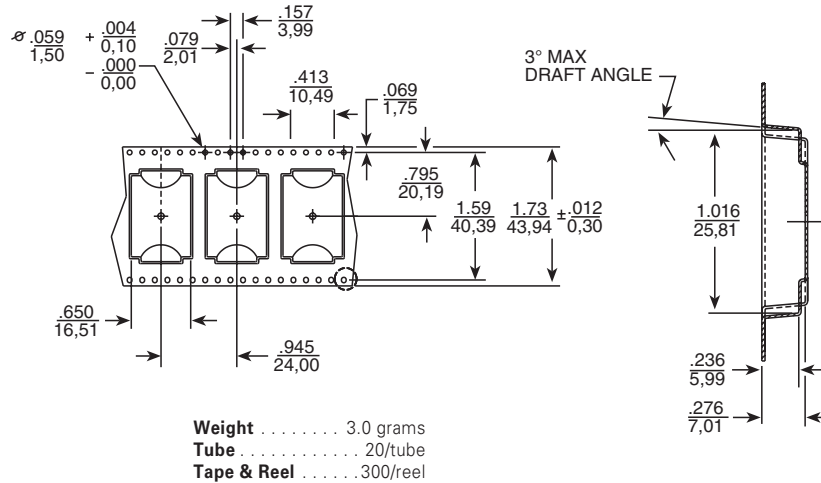
10/100 BASE-T SINGLE PORT TRANSFORMER MODULES

With 1:1 Transmit Turns Ratios



Tape & Reel Specifications

HX1148NL, H1086NL, H1138NL, HX1148NL



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