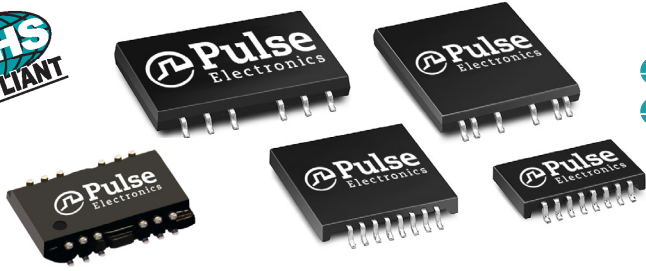


10/100 PC Card LAN Magnetic Modules



- RoHS peak reflow temperature rating 260°C
- Low profile packages from .094" (2,39mm) to .078" (1,98mm) for PC card and cardbus applications

Electrical Specifications @ 25°C - Operating Temperature 0°C to +70°C

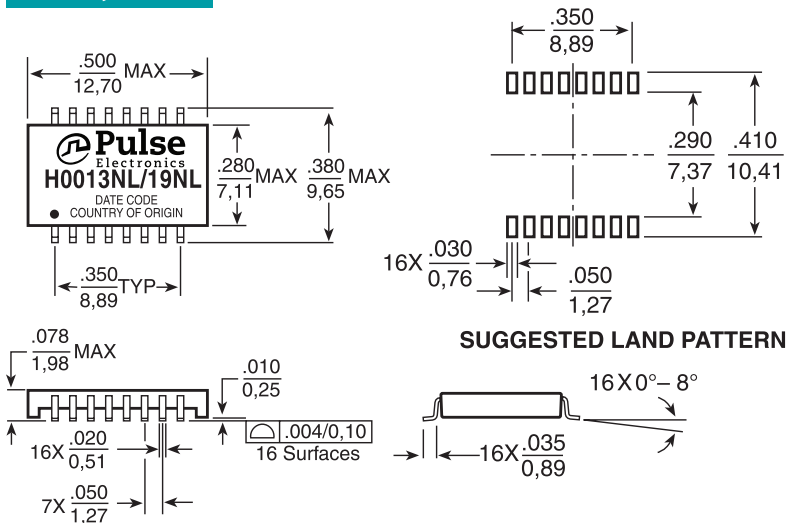
RoHS Compliant Part Number	Turns Ratio (±5%)		Insertion Loss (dB MAX) 100 kHz-100 MHz	Return Loss (dB MIN)			Differential to Common Mode Rejection (dB MIN)			Crosstalk (dB MIN)			Hipot (Vrms MIN)
	TX	wRX		30 MHz	60 MHz	80 MHz	30 MHz	50 MHz	100 MHz	30 MHz	62 MHz	100 MHz	
H0009NL ^{2a,3}	1:1	1:1	-0.9	-16	-12	-11	-35	-33	-20	-50	-45	-40	1500
H0013NL ^{2a,3}	1:1	1:1	-0.9	-16	-12	-11	-35	-33	-20	-50	-45	-40	1500
H0019NL ^{2a,3}	1:1	1:1	-0.9	-18	-12	-11	-40	—	-30	-45	-45	-37	1500
H0020NL ^{2a,3}	1:1	1:1	-1.0	-16	-12	-12	-42	—	-33	-45	-40	-35	1500
H0022NL ^{2a,3}	1:1	1:1	-2.0	-18	-14	-12	-40	-35	-30	-50	-45	-40	1500
H0025NL ^{2a,3}	1:1	1:1	-2.0	-18	-12	-12	-40	-35	-30	-45	-45	-37	1500
H0068ANL ^{2a}	1:1	1:1	-1.0	-16	-14	-12	-40	-35	-30	-45	-40	-37	1500
HX0068ANL ^{1,2a}	1:1	1:1	-1.0	-16	-14	-12	-40	-35	-30	-45	-40	-35	1500

- Extended operating temperature (-40°C to +85°C)
- MSL (Moisture Sensitivity Level): a = 1, b = 2, c = 3, d = 4, e = 5
- Not for sale in U.S.

Notes: When ordering Tape & Reel packaging, add the suffix "T" to the end of the part number. For example: HX0068ANLT.

Mechanicals

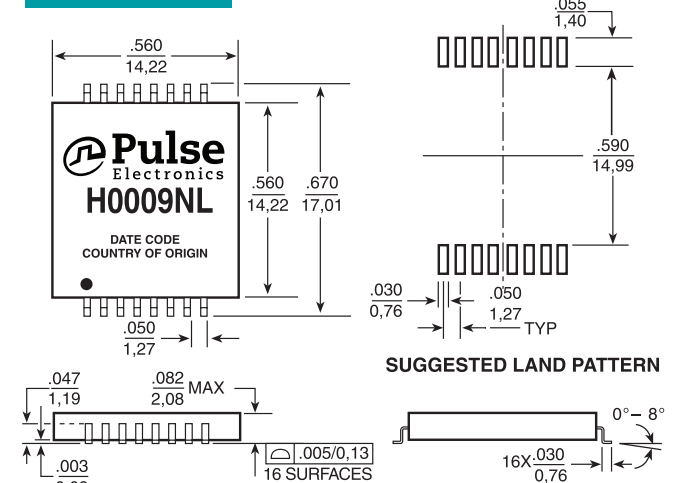
H0013NL, H0019NL



Weight3 grams
Tape & Reel2000/Reel
Tube40/Tube

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

H0009NL



Weight1.3 grams
Tape & Reel900/Reel
Tube25/Tube

USA 858 674 8100

Germany 49 7032 7806 0

Singapore 65 6287 8998

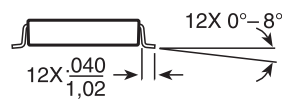
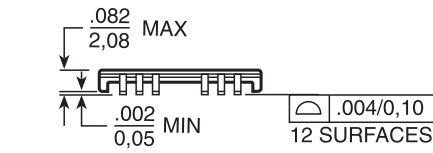
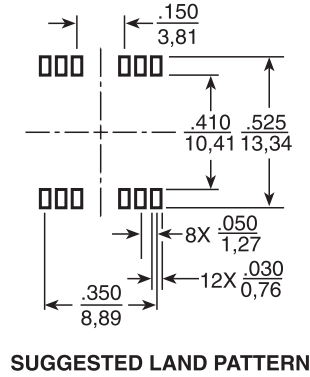
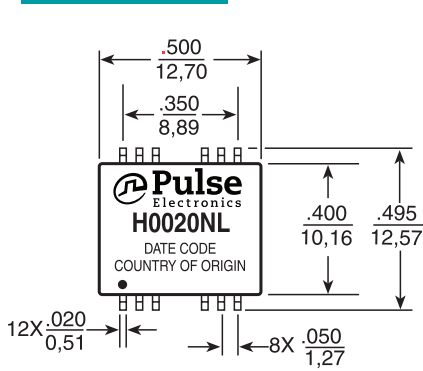
Shanghai 86 21 62787060

China 86 755 33966678

Taiwan 886 3 4356768

Mechanicals (continued)

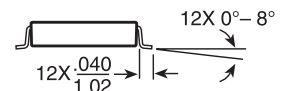
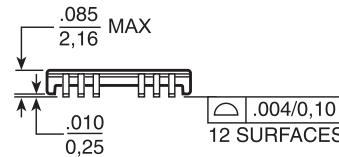
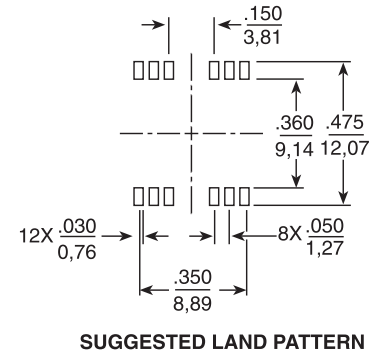
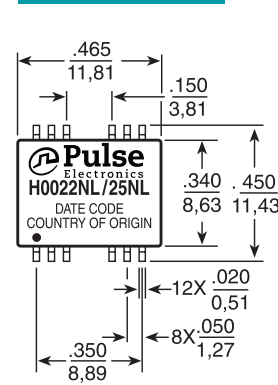
H0020NL



Weight0.3 grams
Tape & Reel500/Reel
Tube40/Tube

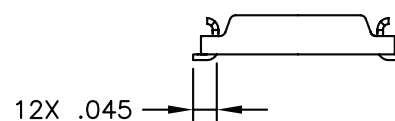
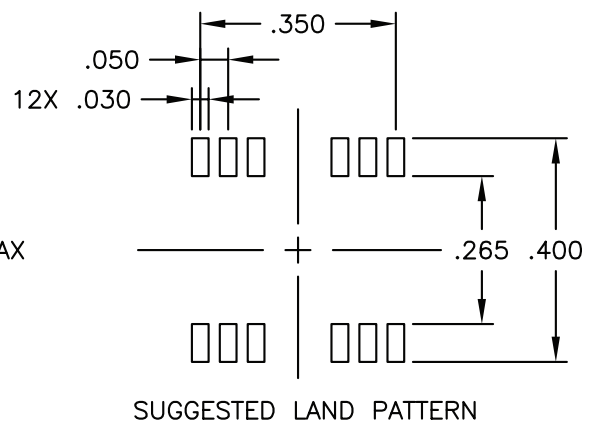
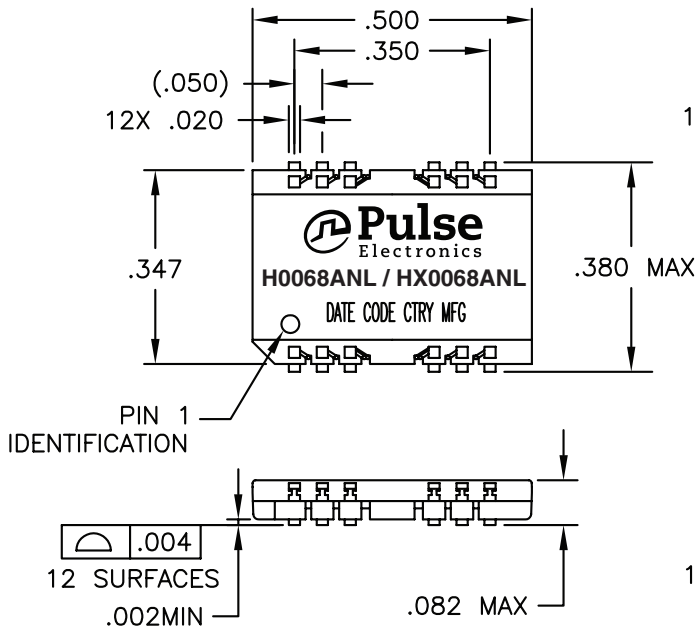
Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

H0022NL, H0025NL



Weight0.355 grams
Tape & Reel1000/Reel
Tube40/Tube

H0068ANL, HX0068ANL



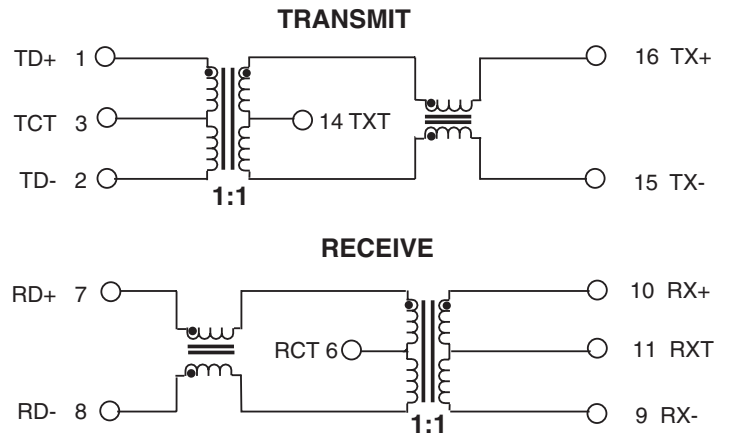
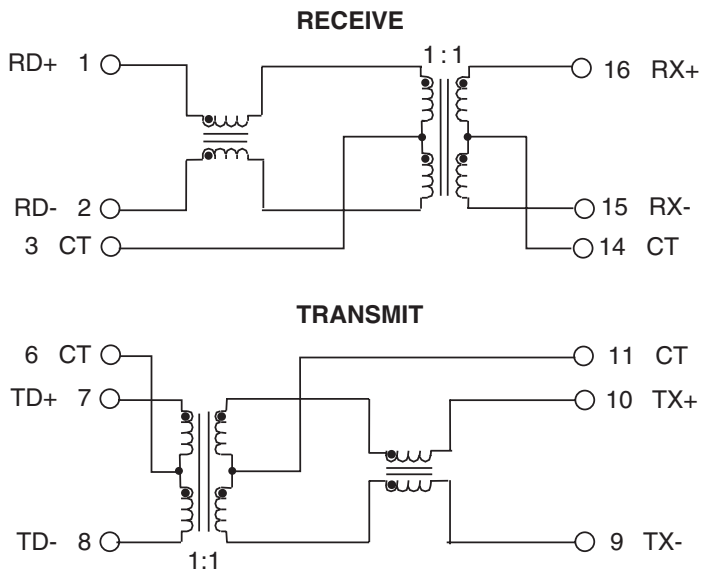
Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

Weight0.4 grams
Tape & Reel2000/Reel
Tube40/Tube

Schematics

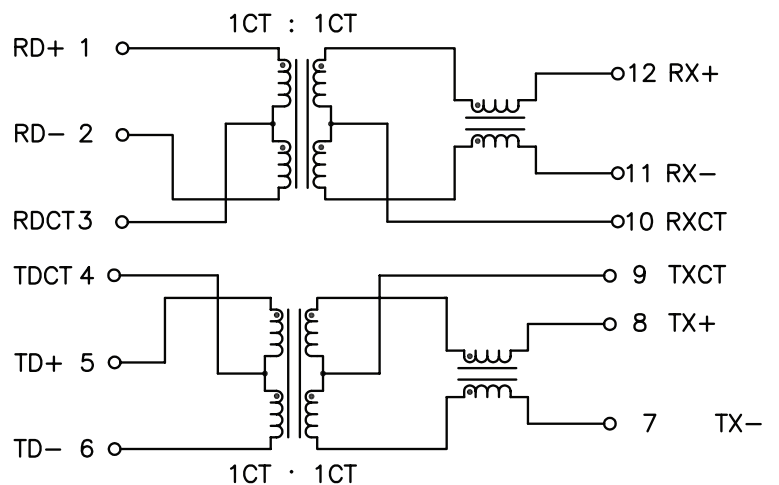
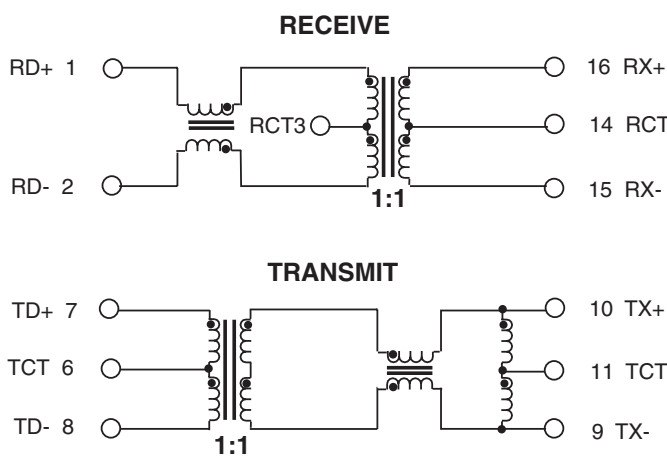
H0009NL, H0013NL, H0019NL, H0025NL

H0020NL



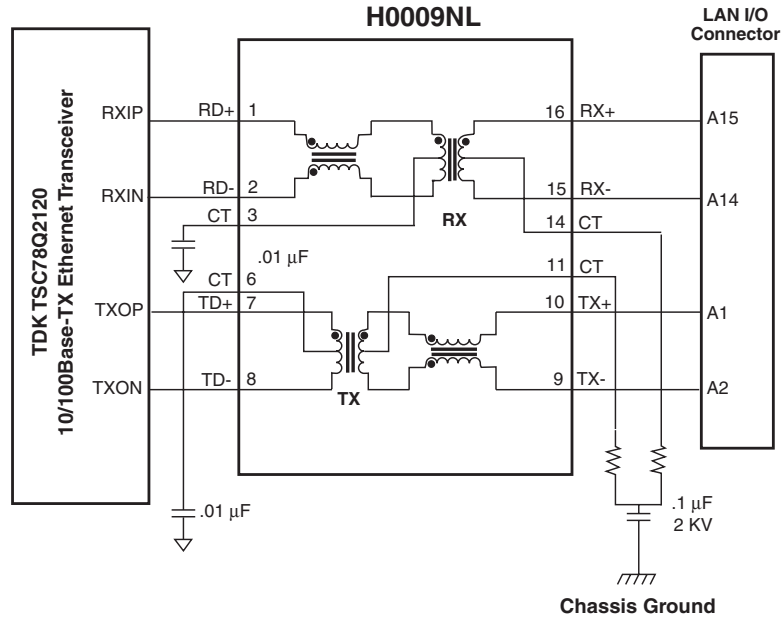
H0022NL

H0068ANL, HX0068ANL



10/100 PC Card LAN Magnetics Modules

Typical Application Layout



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