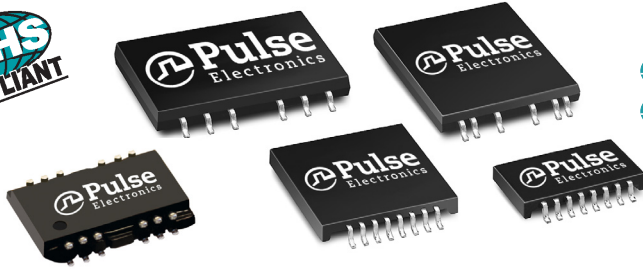


10/100 PC Card LAN Magnetic Modules



- 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

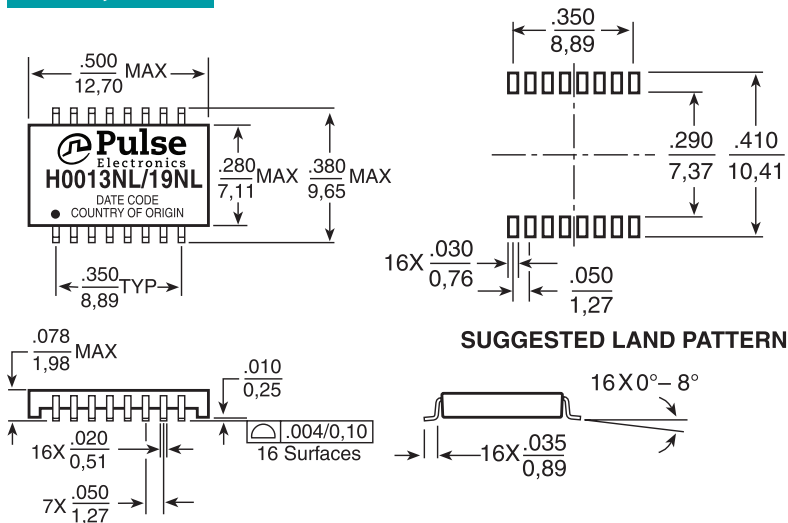
RoHS Compliant Part Number	Turns Ratio (±5%)		Insertion Loss (dB MAX)	Return Loss (dB MIN)			Differential to Common Mode Rejection (dB MIN)			Crosstalk (dB MIN)			Hipot (Vrms MIN)
	TX	wRX		100 kHz-100 MHz	30 MHz	60 MHz	80 MHz	30 MHz	50 MHz	100 MHz	30 MHz	62 MHz	100 MHz
H0009NL ^{2a}	1:1	1:1	-0.9	-16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

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

Mechanicals

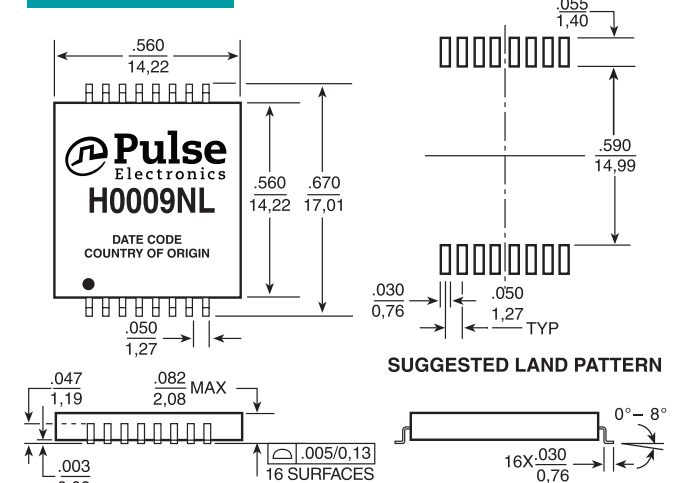
H0013NL, H0019NL



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

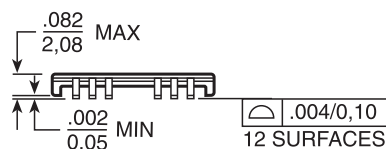
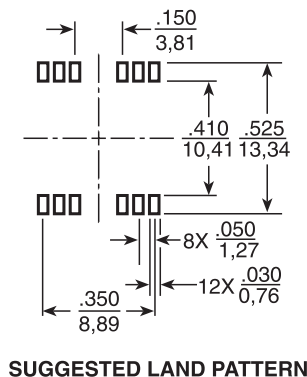
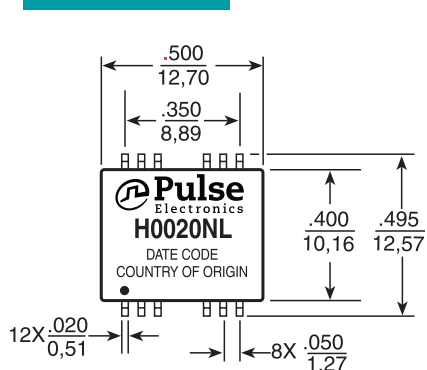
Shanghai 86 21 62787060

China 86 755 33966678

Taiwan 886 3 4356768

Mechanicals (continued)

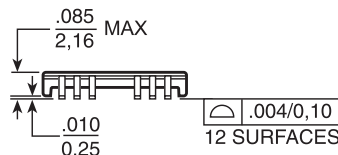
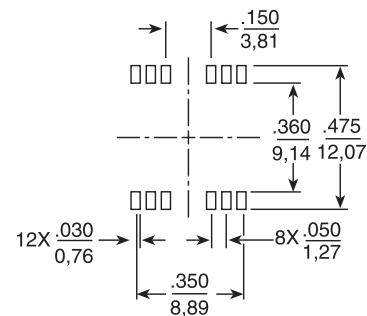
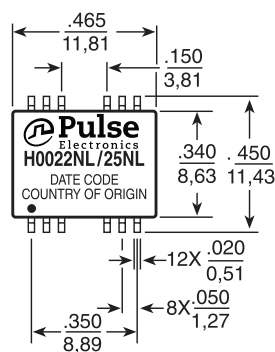
H0020NL



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

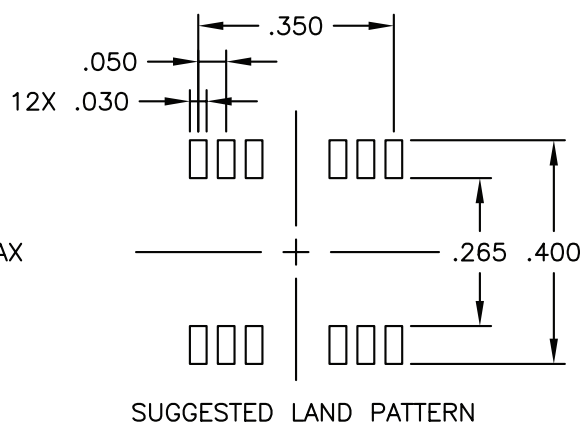
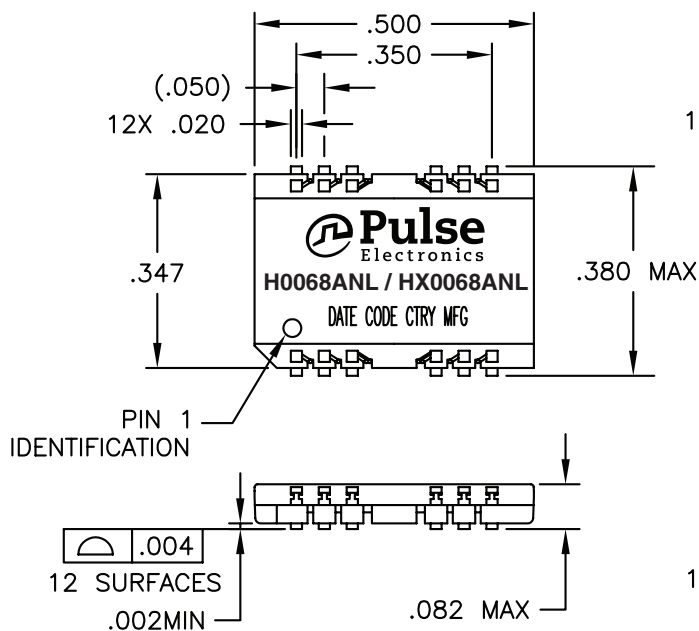
Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

H0022NL, H0025NL



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

H0068ANL, HX0068ANL

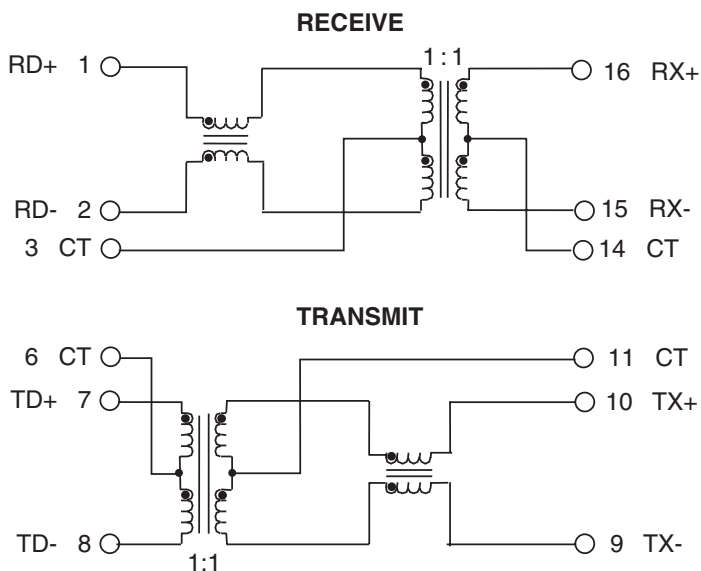


Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

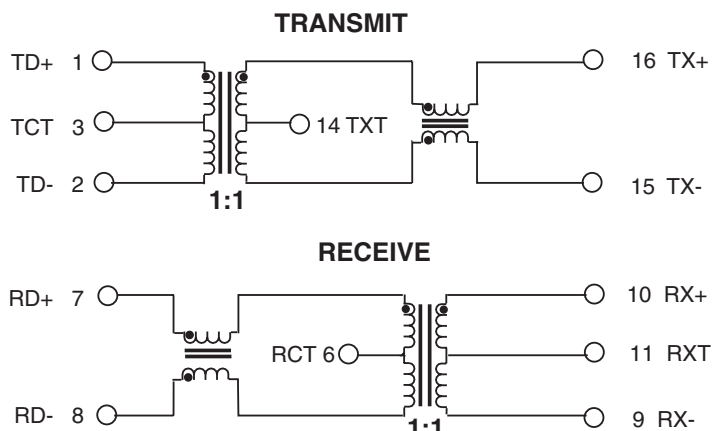
Weight0.4 grams
Tape & Reel2000/Reel
Tube40/Tube

Schematics

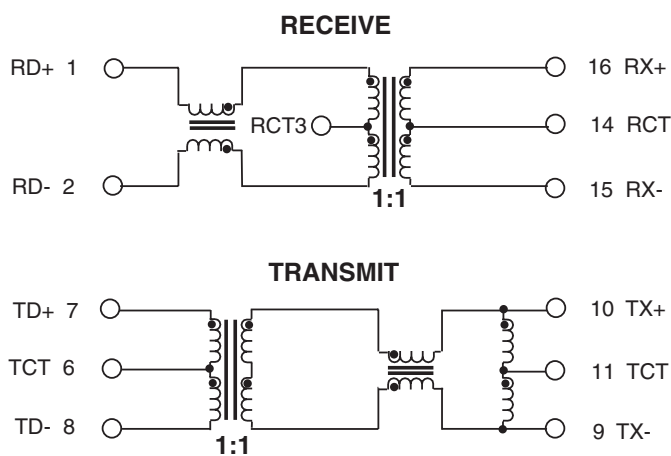
H0009NL, H0013NL, H0019NL, H0025NL



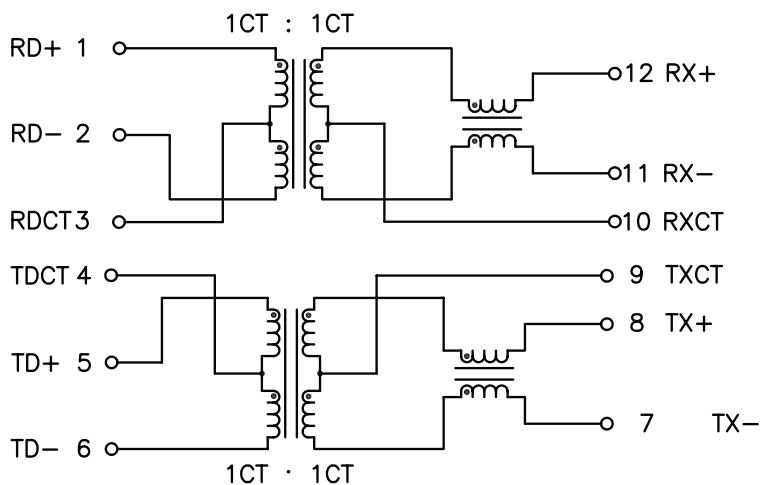
H0020NL



H0022NL

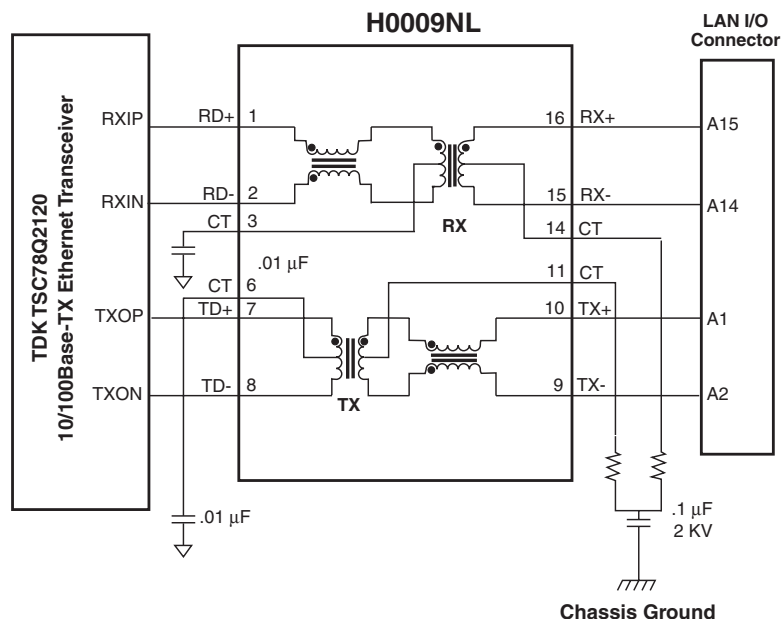


H0068ANL, HX0068ANL



10/100 PC Card LAN Magnetics Modules

Typical Application Layout



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