100Base-TX Single Port Surface Mount Magnetics with PoE* Option and 1:1 Turns Ratios

**Power over Ethernet*



- *RoHS peak reflow temperature rating: 245°C*
- *Meets IEEE 802.3 specification*
- *Compact footprint for use in the most space-restrictive applications*

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

Part Number[2]	Turns Ratio		Insertion Loss 100 kHz-100 MHz	Return Loss (dB TYP)			Differential to Common Mode Rejection (dB TYP)			Crosstalk (dB TYP)			Hipot (Vrms MIN)
	TX	RX	(dB MAX)	30 MHz	60 MHz	80 MHz	30 MHz	50 MHz	100 MHz	30 MHz	60 MHz	100 MHz	
H1102FNL[3a, 4]	1:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
HX1188FNL[1, 3a, 4]	1:1	1:1	-1.0	-20	-14	-12	-42	-37	-32	-45	-40	-35	1500
HX1198FNL[1, 3a, 4]	1:1	1:1	-1.0	-20	-14	-12	-42	-37	-32	-45	-40	-35	1500
H1197FNL[3a, 4]	1:1	1:1	-1.2	-16	-14	-12	-42	-37	-33	-45	-40	-35	1500
H1260FNL[3a, 4]	1:1	1:1	-1.1	-16	-14	-12	-43	-37	-33	-35	-40	-35	1500
HX1260FNL[1, 3a, 4]	1:1	1:1	-1.1	-16	-14	-12	-43	-37	-33	-45	-40	-35	1500
H2019FNL[3a, 5]	1:1	1:1	-1.2	-16	-14	-12	-43	-37	-33	-45	-40	-35	1500
HX2019FNL[1, 3a, 5]	1:1	1:1	-1.4	-16	-14.4	-12	-43	-37	-33	-45	-40	-35	1500

1. Operating temperature -40°C to +85°C

2. For Tape & Reel packaging, add a **"T"** suffix at the end of the part number when ordering, e.g. H1102FNL**T**.

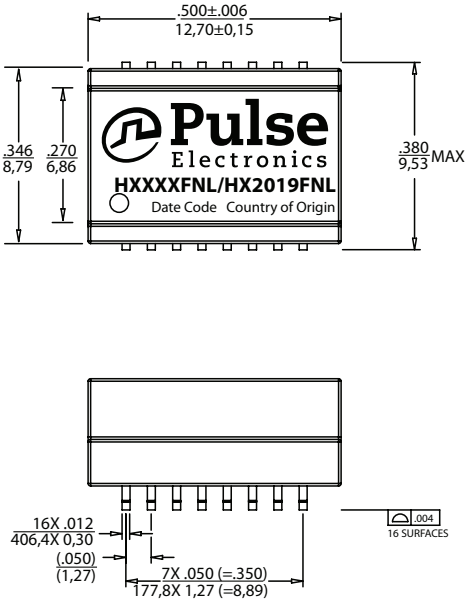
3. MSL = Moisture Sensitivity Level a=1 b=2 c=3 d=4

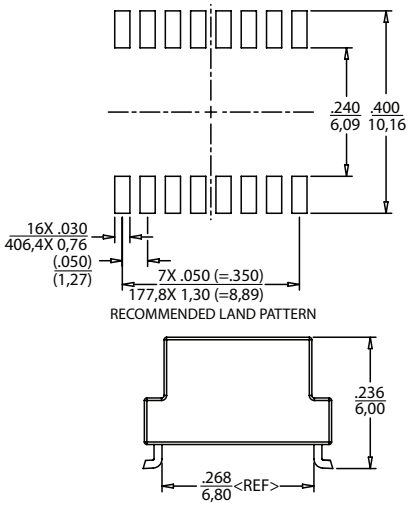
4. Suitable for Aut-MDIX applications

5. PoE (IEEE 802.3af/ANSI X3.263 compliant)

Mechanical

H1102FNL, HX1188FNL, HX1198NL, H1197FNL, H1260FNL, HX1260FNL, H2019FNL, HX2019FNL





Dimensions: Inches / mm

Unless otherwise specified, all tolerances are in inches. Tolerances are:

DECIMALS	ANGLES
.XX ±0.1	**±1°**
.XXX ±.005	

Weight .....0.9 grams
Tube 40/tube
Tape & Reel 600/reel

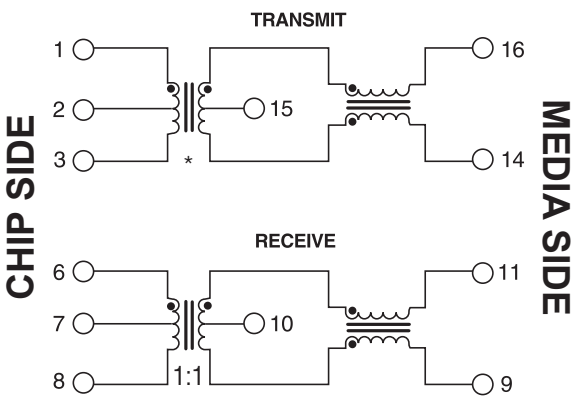
USA 858 674 8100 Germany 49 7032 7806 0 Singapore 65 6287 8998 Shanghai 86 21 62787060 China 86 755 33966678 Taiwan 886 3 4356768

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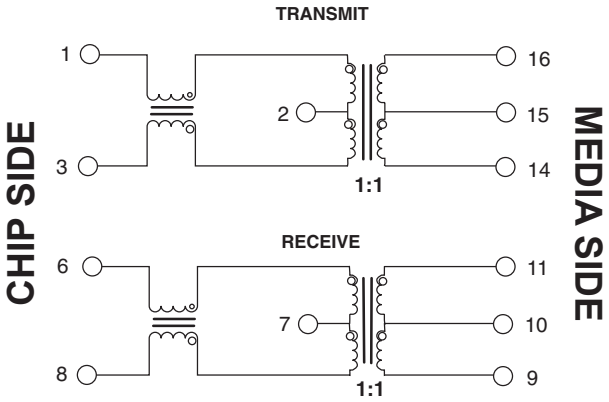
**Power over Ethernet*

Schematics

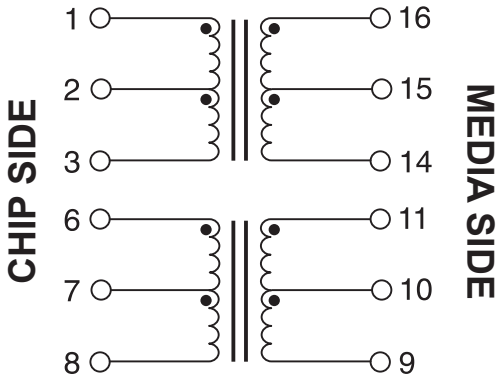
H1102FNL, HX1188FNL H1260FNL, HX1260FNL



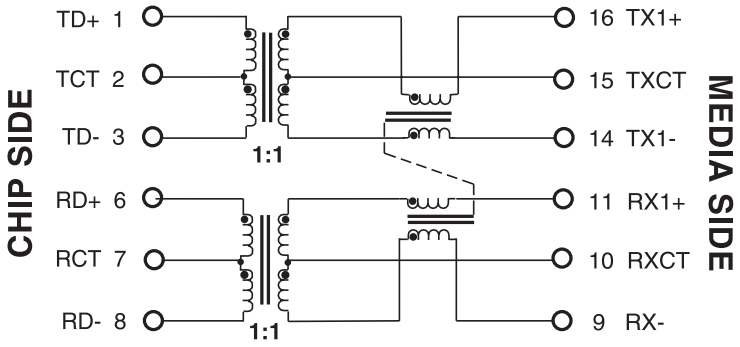
HX1198FNL



H1197FNL



H2019FNL, HX2019FNL

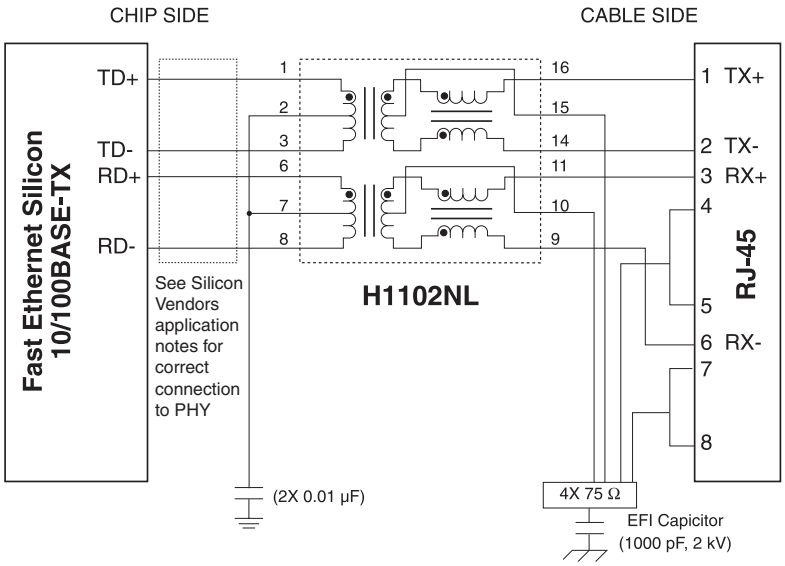


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**Power over Ethernet*

Typical Application Circuit

H1102FNL



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