





10/100BASE-T SINGLE PORT SURFACE MOUNT MAGNETICS

With Various Turns Ratios



-  RoHS-5 peak reflow temperature rating 235°C
-  RoHS-6 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

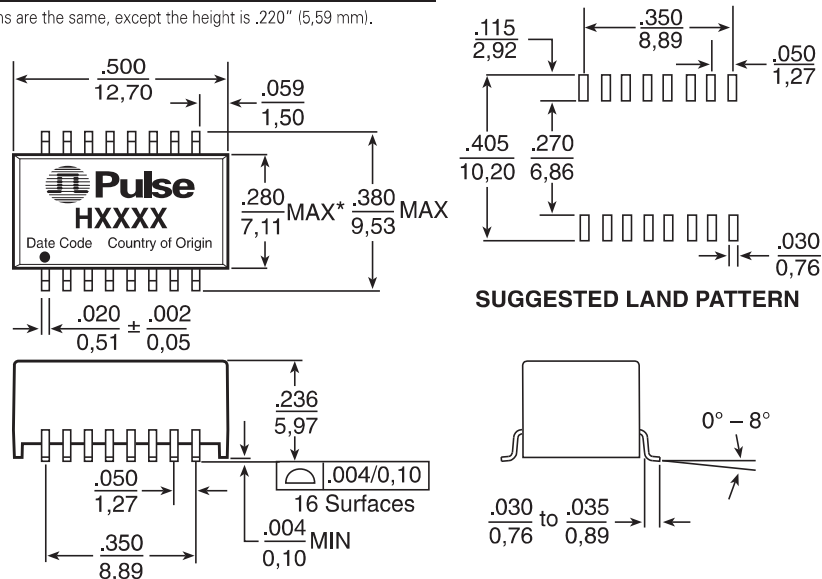
RoHS-6 ⁵ Compliant Part Number	RoHS-5 ⁴ Compliant Part Number	Turns Ratio		Insertion Loss 100kHz–100MHz (db MAX)	Return Loss (dB TYP)			Differential to Common Mode Rejection (dB TYP)			Crosstalk (dB TYP)			Hipot (VRMS MIN)
		TX	RX		30MHz	60MHz	80MHz	30MHz	50MHz	100MHz	30MHz	60MHz	100MHz	
H1100NL ^{3a}	H1100	2:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1101NL ^{3a}	—	1.25:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1102NL ^{3a}	H1102	1:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1121NL ^{3c}	H1121	1:1.414	1:1	-1.1	-18	-12	-11.5	-42	-37	-30	-45	-40	-35	1500
H1183NL ^{3a}	H1183	1:1	1:1	-1.0	-18	-14	-12	-40	-40	-40	-35	-35	-35	1500
H1199NL ^{3a}	H1199	1:1	1:1	-0.9	-18	-12	-11	-40	-35	-30	-45	-45	-37	1500
HX1188NL ^{1, 3a}	HX1188 ¹	1:1	1:1	-1.0	-20	-14	-12	-42	-37	-32	-45	-40	-35	1500
HX1198NL ^{1, 3a}	HX1198 ¹	1:1	1:1	-1.0	-20	-14	-12	-42	-37	-32	-45	-40	-35	1500
H1302NL ^{3a}	H1302	1:1	1:1	-1.1	-16	-10	-10	-42	-37	-32	-35	-30	-30	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. H1102T.
3. **MSL** = Moisture Sensitivity Level a=1 b=2 c=3 d=4
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).
5. **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).

Mechanical

H110X, H1121, H1183,* H1199, HX1188, HX1198, H1302

* For part number H1183, all dimensions are the same, except the height is .220" (5,59 mm).



Dimensions: Inches
mm

Unless otherwise specified,
all tolerances are ± $\frac{.010}{0,25}$

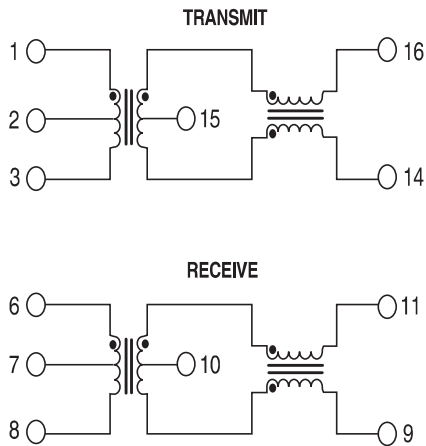
Weight0.9 grams
Tube 45/tube
Tape & Reel 600/reel

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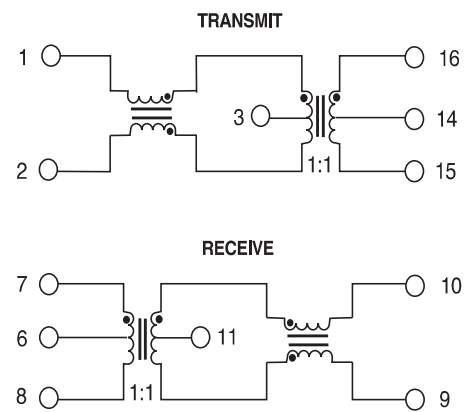


Schematics

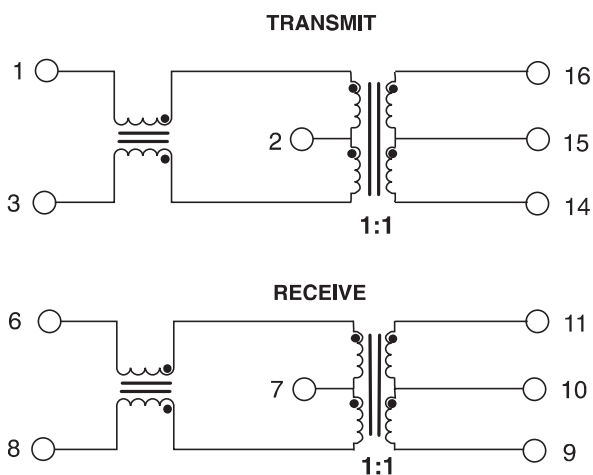
H110X, H1121, HX1188



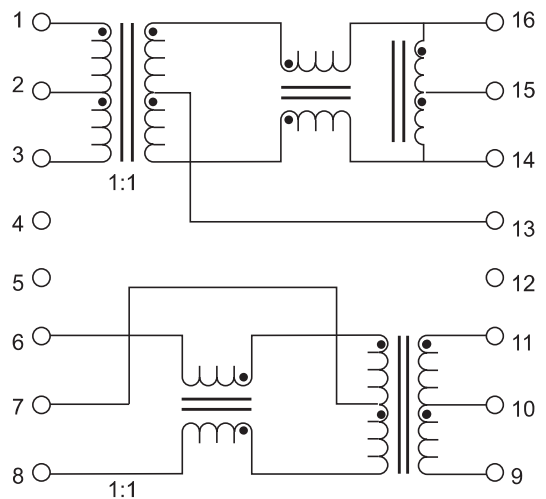
H1199



HX1198, H1183



H1302

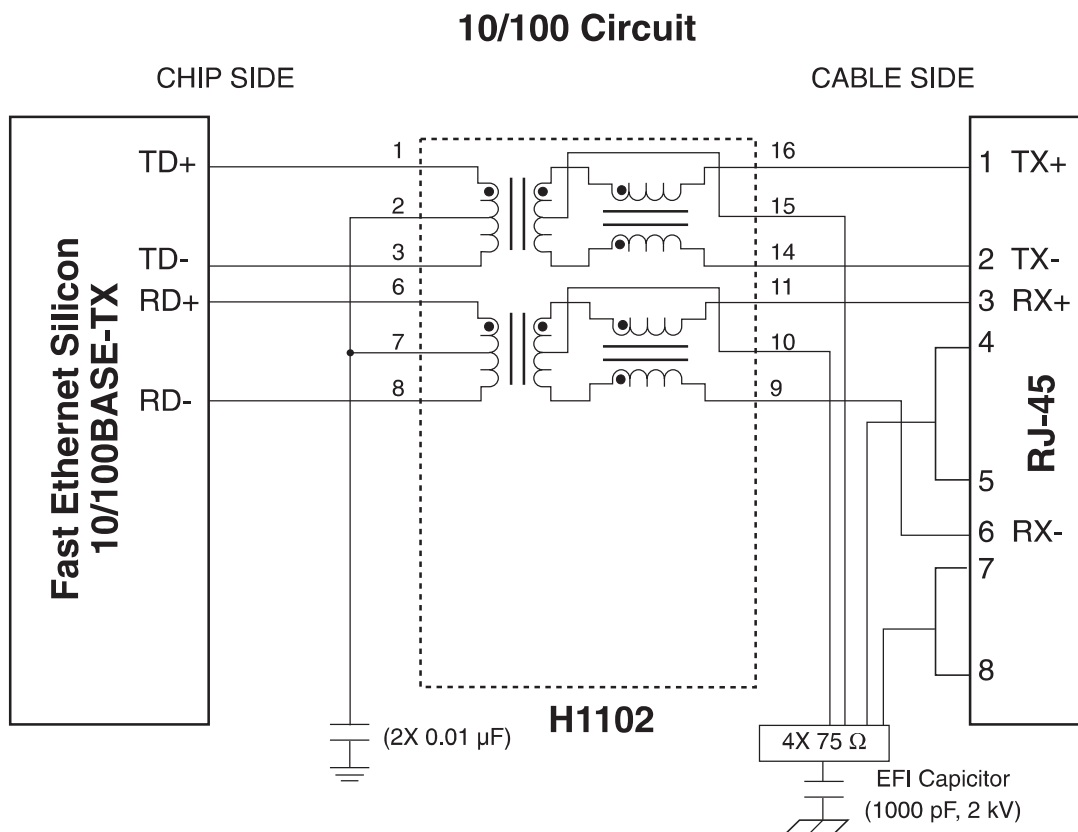


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Typical Application Circuit

H1102



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