

# 10/100BASE-T SINGLE PORT SURFACE MOUNT MAGNETICS

With Various Turns Ratios



- Meets IEEE 802.3 and ANSI X3.263 standards, including 350  $\mu$ H OCL with 8 mA bias
- Designed for reflow soldering at temperatures up to 235°C
- Compact footprint for use in the most space-restrictive applications

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

Part Number	Turns Ratio		Insertion Loss 100 kHz–100 MHz (dB MAX)	Return Loss (dB TYP)			Differential to Common Mode Rejection (dB TYP)			Crosstalk (dB TYP)			Hipot (Vrms MIN)
	TX	RX		30 MHz	60 MHz	80 MHz	30 MHz	50 MHz	100 MHz	30 MHz	60 MHz	100 MHz	
H1100	2:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1101	1.25:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1102	1:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1211**	1:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1212**	1:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1121	1:1.414	1:1	-1.1	-18	-12	-11.5	-42	-37	-30	-45	-40	-35	1500
H1183	1:1	1:1	-1.0	-18	-14	-12	-40	-40	-40	-35	-35	-35	1500
H1199	1:1	1:1	-0.9	-18	-12	-11	-40	-35	-30	-45	-45	-37	1500
HX1188*	1:1	1:1	-1.0	-20	-14	-12	-42	-37	-32	-45	-40	-35	1500
HX1198*	1:1	1:1	-1.0	-20	-14	-12	-42	-37	-32	-45	-40	-35	1500
H1302	1:1	1:1	-1.1	-16	-10	-10	-42	-37	-32	-35	-30	-30	1500

\*Operating temperature -40°C to +85°C.

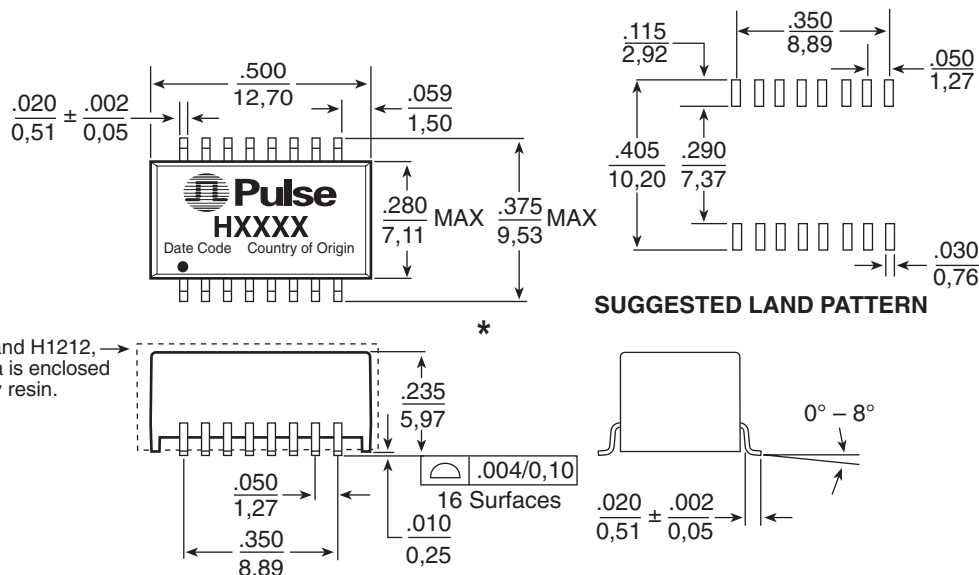
\*\*The H1211 and H1212 are transfer moulded versions of H1102.

## Mechanical

### H110X, H121X\*\*, H1121, H1183,\* H1199, HX1188, HX1198, H1302

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

\*\*The H1211 and H1212 dimensions are the same as H110X, except the height is .240: (6,12 mm)



Dimensions:  $\frac{\text{Inches}}{\text{mm}}$

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

Weight . . . . . 2.8 grams  
 Tube . . . . . .45/tube  
 Tape & Reel . . . . .600/reel

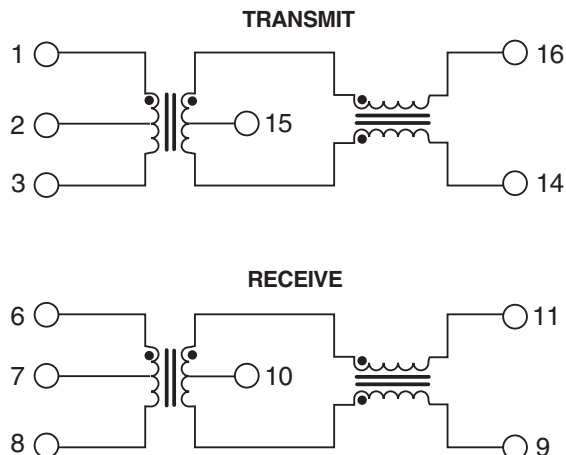
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With Various Turns Ratios

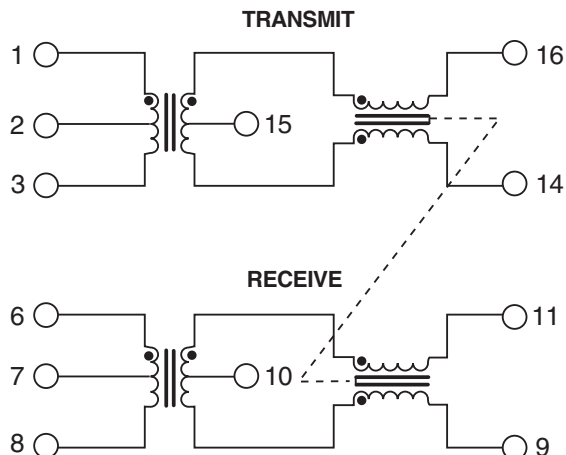


## Schematics

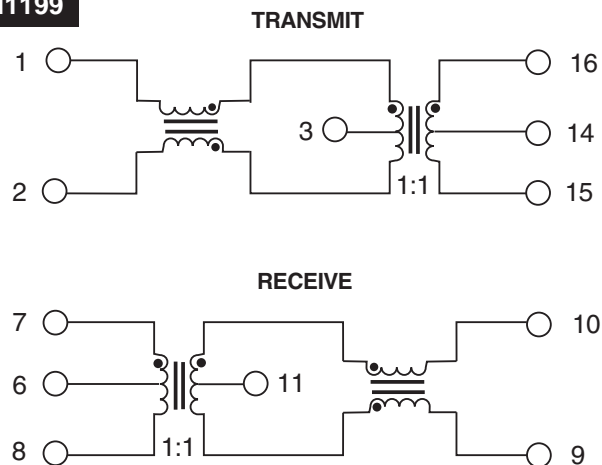
**H110X, H1211, H1121, HX1188**



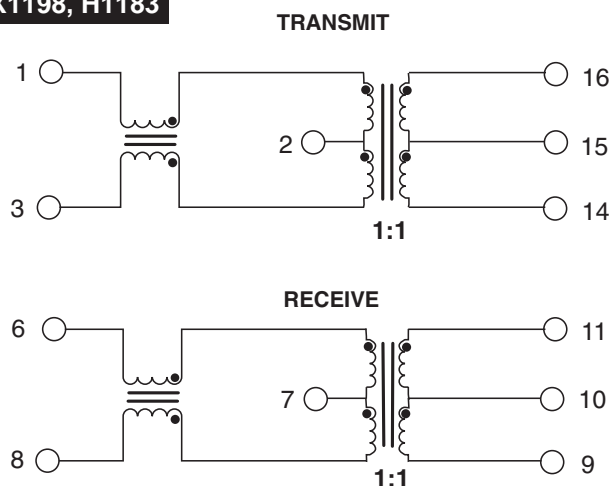
**H1212**



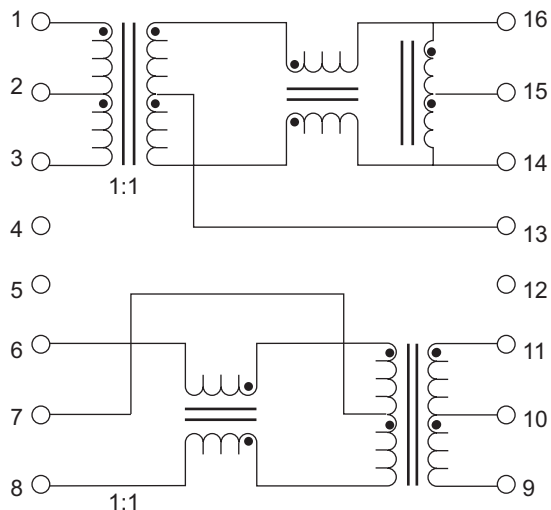
**H1199**



**HX1198, H1183**



**H1302**

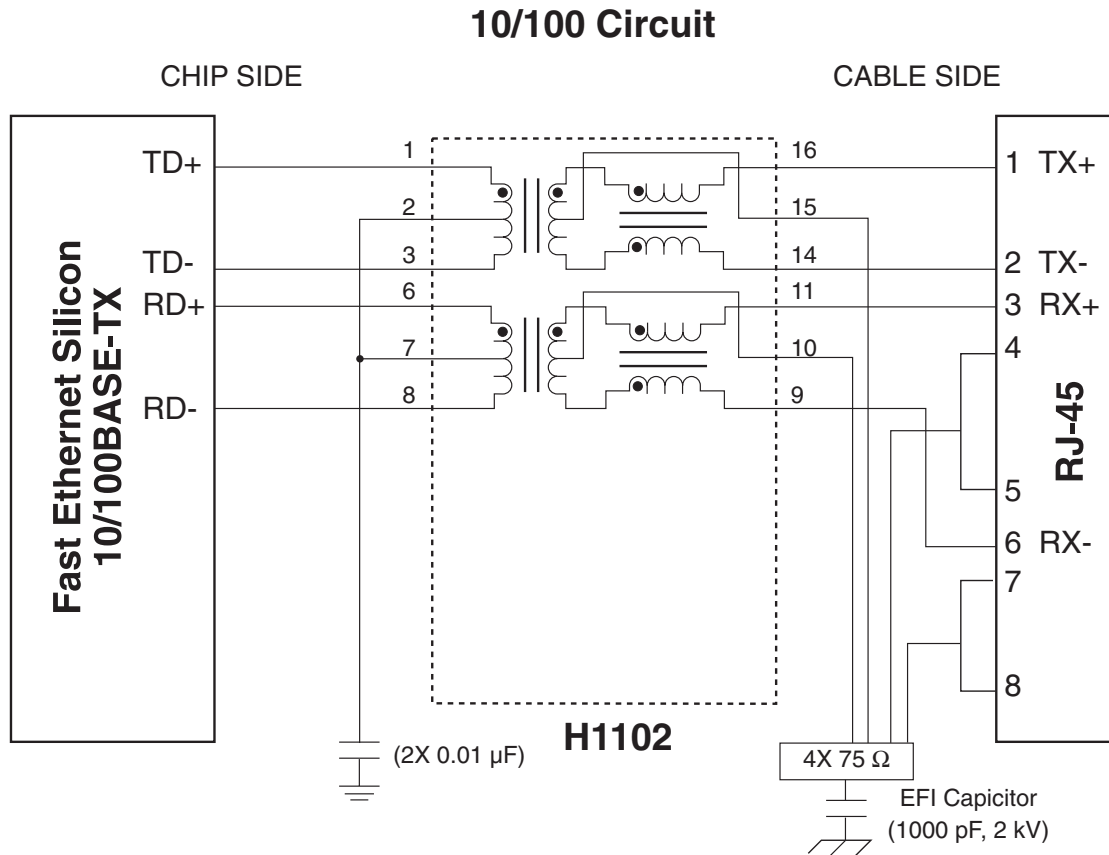


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## Typical Application Circuit

H1102



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