




# 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<br>100 kHz–100 MHz<br>(dB MAX) | Return Loss<br>(dB TYP) |        |        | Differential to Common<br>Mode Rejection<br>(dB TYP) |        |         | Crosstalk<br>(dB TYP) |        |         | Hipot<br>(Vrms<br>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                   |

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

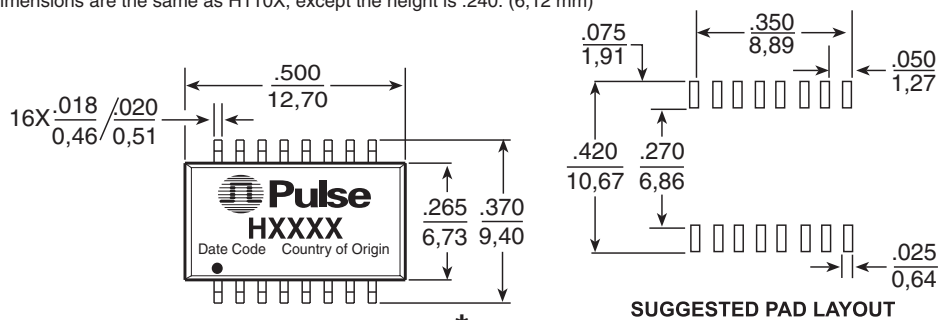
\*\*The H1211 and H1212 are transfer moulded versions of H1102.

## Mechanical

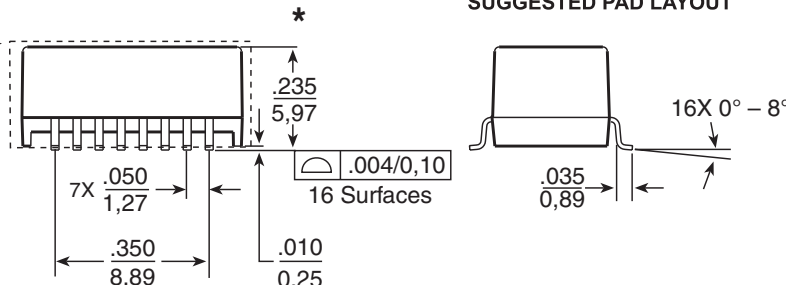
### H110X, H121X\*\*, H1121, H1183,\* H1199, HX1188, HX1198

\*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)



H1211 and H1212, this area is enclosed in epoxy resin.



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

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

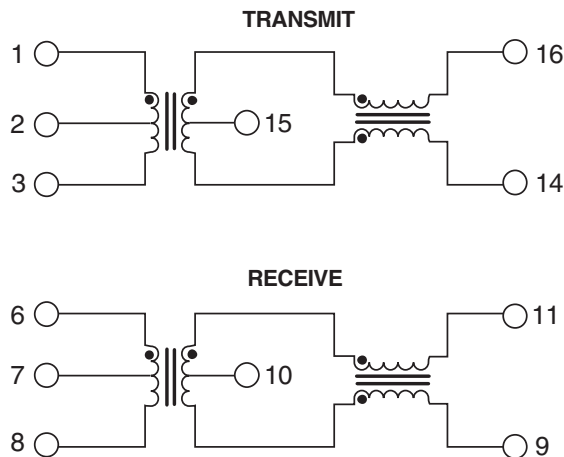
Weight . . . . . 2.8 grams  
 Tube . . . . . .45/tube  
 Tape & Reel . . . . .600/reel

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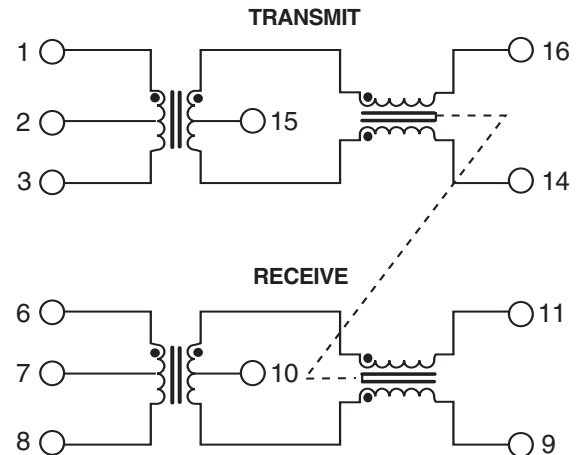


## Schematics

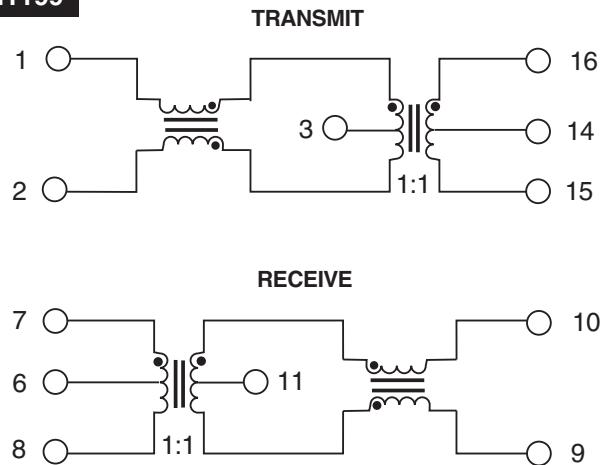
**H110X, H1211, H1121, HX1188**



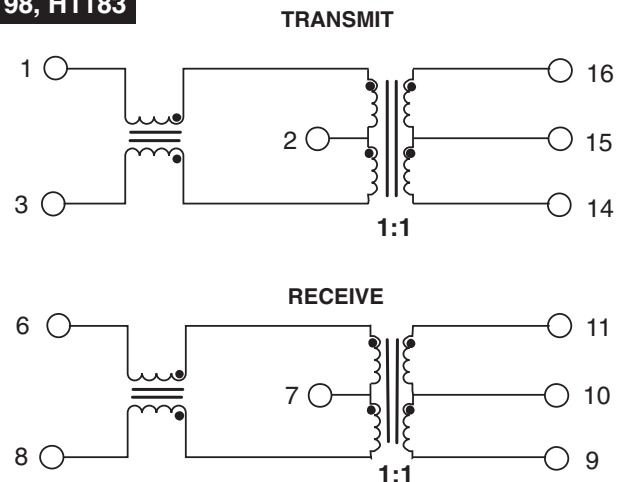
**H1212**



**H1199**



**HX1198, H1183**



## For More Information :

**UNITED STATES  
(Worldwide)**

12220 World Trade Drive  
San Diego, CA 92128  
U.S.A.  
<http://www.pulseeng.com>  
TEL: 858 674 8100  
FAX: 858 674 8262

**UNITED KINGDOM  
(Northern Europe)**

1 & 2 Huxley Road  
The Surrey Research Park  
Guildford, Surrey GU2 5RE  
United Kingdom  
TEL: 44 1483 401700  
FAX: 44 1483 401701

**FRANCE  
(Southern Europe)**

Zone Industrielle  
F-39270  
Orgelet  
France  
TEL: 33 3 84 35 04 04  
FAX: 33 3 84 25 46 41

**SINGAPORE  
(Southern Asia)**

150 Kampong Ampat  
#07-01/02  
KA Centre  
Singapore 368324  
TEL: 65 287 8998  
FAX: 65 280 0080

**TAIWAN, R.O.C.  
(Northern Asia)**

3F-4, No. 81, Sec. 1  
HsinTai Wu Road  
Hsi-Chih, Taipei Hsien  
Taiwan, R.O.C.  
Tel: 886 2 2698 0228  
FAX: 886 2 2698 0948

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