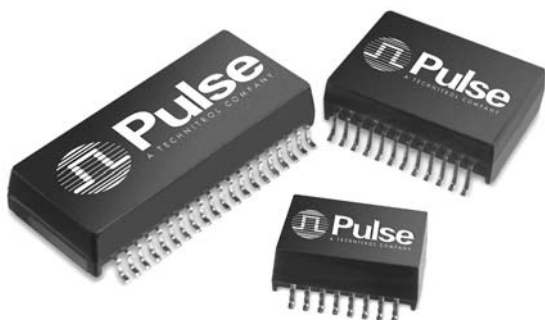


# Star Magnetics™

## Fast Ethernet (10/100) & Gigabit (10/100/1000)



- Manufacturing design complies with IEEE 802.3 standard
- Designed for reflow soldering process up to 235°C IR reflow
- Compact footprint

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

| Part Number<br>Data Rate (Mbps) |             | Turns Ratio |     | Number<br>of<br>Ports | Insertion Loss<br>(dB MAX) |       |         |         | Return Loss<br>(Z out = 100 Ω ±15%) |        |        |         | Crosstalk<br>(adjacent channels, dB MIN) |        |         | Hipot<br>(V <sub>RMS</sub> MIN) |
|---------------------------------|-------------|-------------|-----|-----------------------|----------------------------|-------|---------|---------|-------------------------------------|--------|--------|---------|------------------------------------------|--------|---------|---------------------------------|
| 10/100                          | 10/100/1000 | TX          | RX  |                       | 0.1 MHz                    | 1 MHz | 100 MHz | 125 MHz | 30 MHz                              | 60 MHz | 80 MHz | 100 MHz | 30 MHz                                   | 60 MHz | 100 MHz |                                 |
| H0055 <sup>1</sup>              | —           | 1:1         | 1:1 | 1                     | -2.5                       | —     | -1.0    | —       | -16                                 | -10    | -10    | —       | -45                                      | -40    | -33     | 1500                            |
| H0056 <sup>2</sup>              | —           | 1:1         | 1:1 | 1                     | —                          | -0.8  | -0.9    | —       | -16                                 | -10    | -10    | —       | -45                                      | -40    | -33     | 1500                            |
| H1259                           | —           | 1:1         | 1:1 | 4                     | -1.2                       | —     | -1.4    | —       | -16                                 | -10    | -10    | —       | -45                                      | -40    | -33     | 1500                            |
| H1260                           | —           | 1:1         | 1:1 | 1                     | -1.1                       | —     | -1.1    | —       | -16                                 | -10    | -10    | —       | -35                                      | -30    | -30     | 1500                            |
| H1265                           | —           | 1:1         | 1:1 | 1                     | -1.3                       | —     | -1.0    | —       | -16                                 | -10    | -10    | —       | -40                                      | -38    | -33     | 1500                            |
| H1266                           | —           | 1:1         | 1:1 | 4                     | -1.2                       | —     | -1.0    | —       | -16                                 | -10    | -10    | —       | -45                                      | -40    | -30     | 1500                            |
| H1278                           | —           | 1:1         | 1:1 | 1                     | -1.1                       | —     | -1.0    | —       | -16                                 | -10    | -10    | —       | -45                                      | -40    | -33     | 1500                            |
| —                               | H5062       | 1:1         | 1:1 | 1                     | -1.1                       | —     | -1.0    | -2.0    | -18                                 | -12    | -12    | -10     | -43                                      | -37    | -33     | 1500                            |

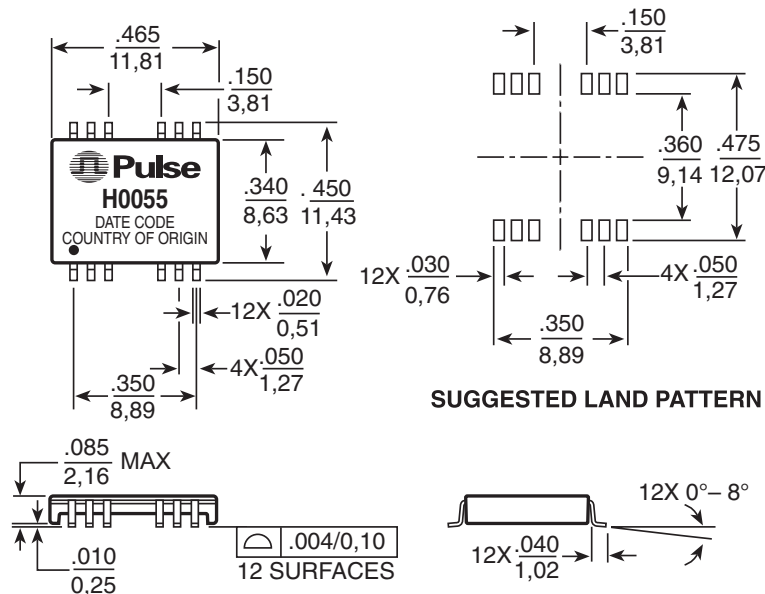
1. H0055 is designed to meet 200 μH nom.

2. H0056 is designed to meet 300 μH nom.

NOTE: "—" = not tested at that frequency.

## Mechanicals

### H0055



Weight . . . . .355 grams  
Tape & Reel . . .1000/reel  
Tube . . . . .40/tube

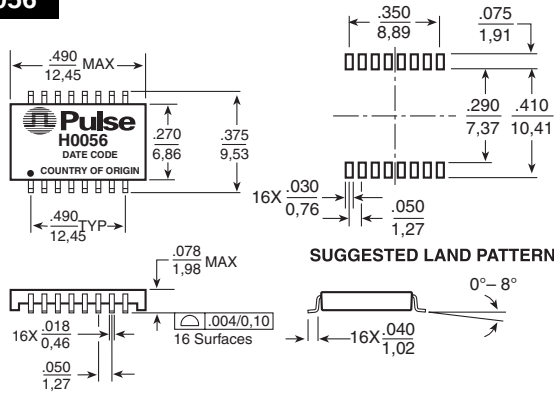
Dimensions:  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$

# Star Magnetics™ Fast Ethernet (10/100) & Gigabit (10/100/1000)



## Mechanicals (continued)

### H0056

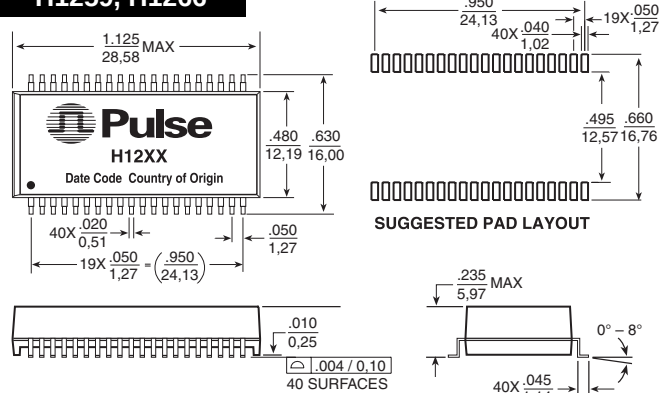


Weight . . . . .3 grams  
Tape & Reel . . .2000/reel  
Tube . . . . .40/tube

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

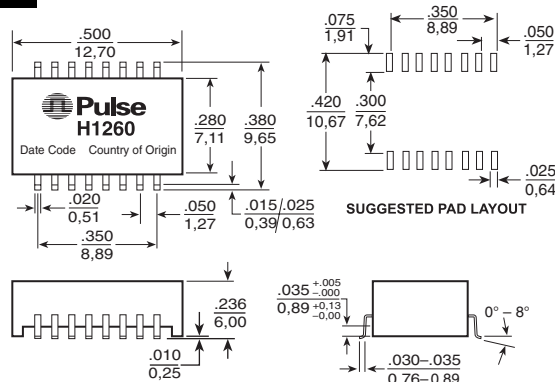
Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$

### H1259, H1266



Weight . . . . .4.8 grams  
Tape & Reel . . .250/reel  
Tube . . . . .15/tube

### H1260

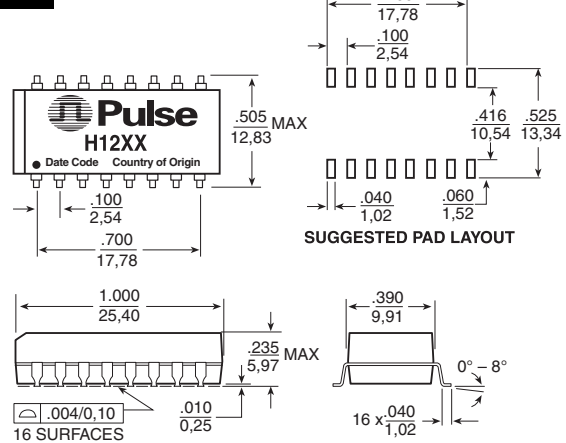


Weight . . . . .2.8 grams  
Tube . . . . .45/tube  
Tape & Reel . . .600/reel

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

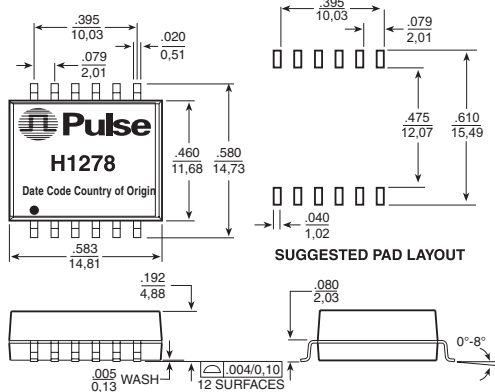
Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$

### H1265



Weight . . . . .3.0 grams  
Tube . . . . .20/tube  
Tape & Reel . . .300/reel

### H1278

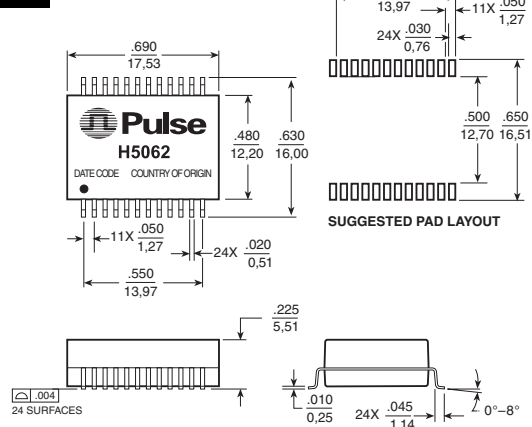


Weight . . . . .1.7 grams  
Tape & Reel . . .350/reel  
Tube . . . . .30/tube

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

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

### H5062



Weight . . . . .2.7 grams  
Tape & Reel . . .300/reel  
Tube . . . . .25/tube

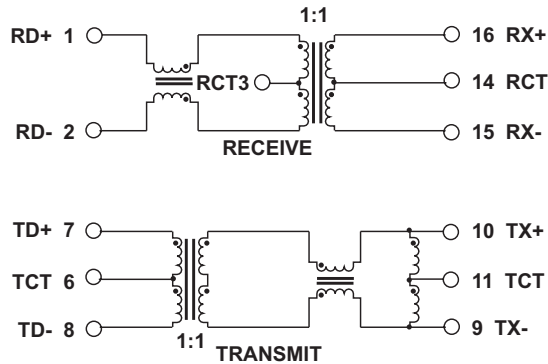
# Star Magnetics™

## Fast Ethernet (10/100) & Gigabit (10/100/1000)

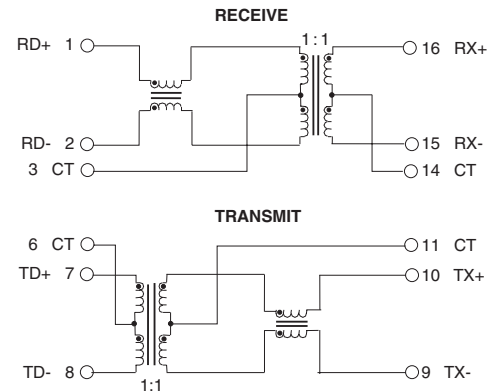


### Schematics

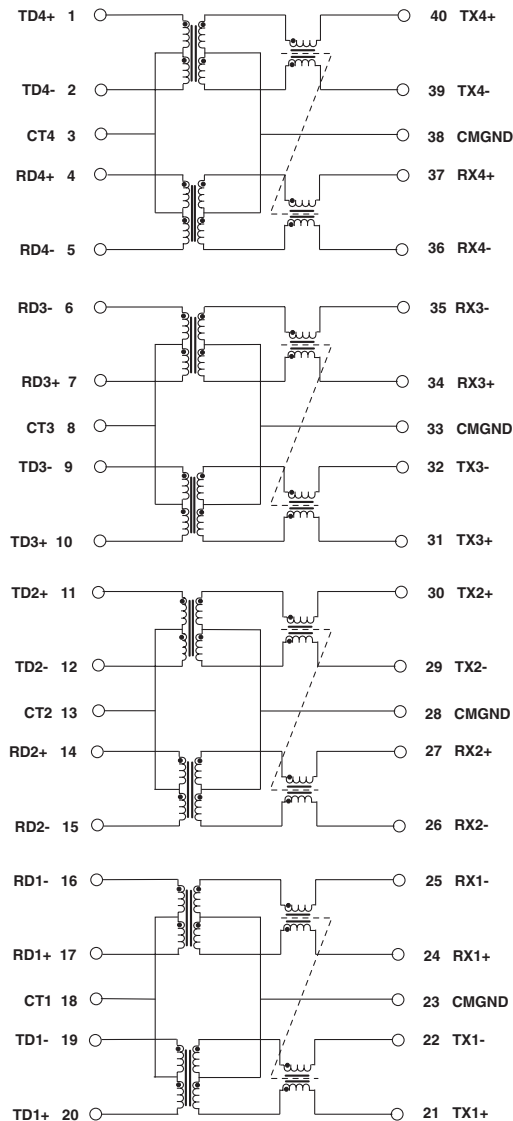
**H0055**



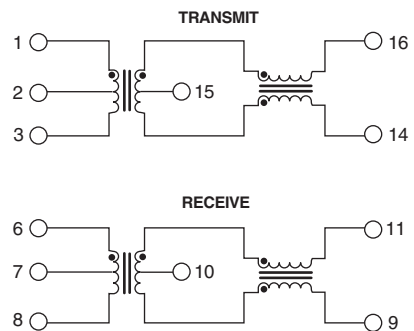
**H0056**



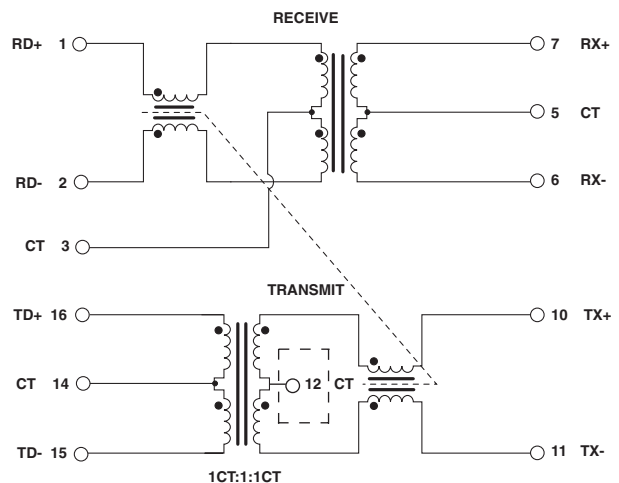
**H1259**



**H1260**



**H1265**



H1265: 3-core design (T3 same toroid core)

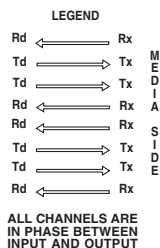
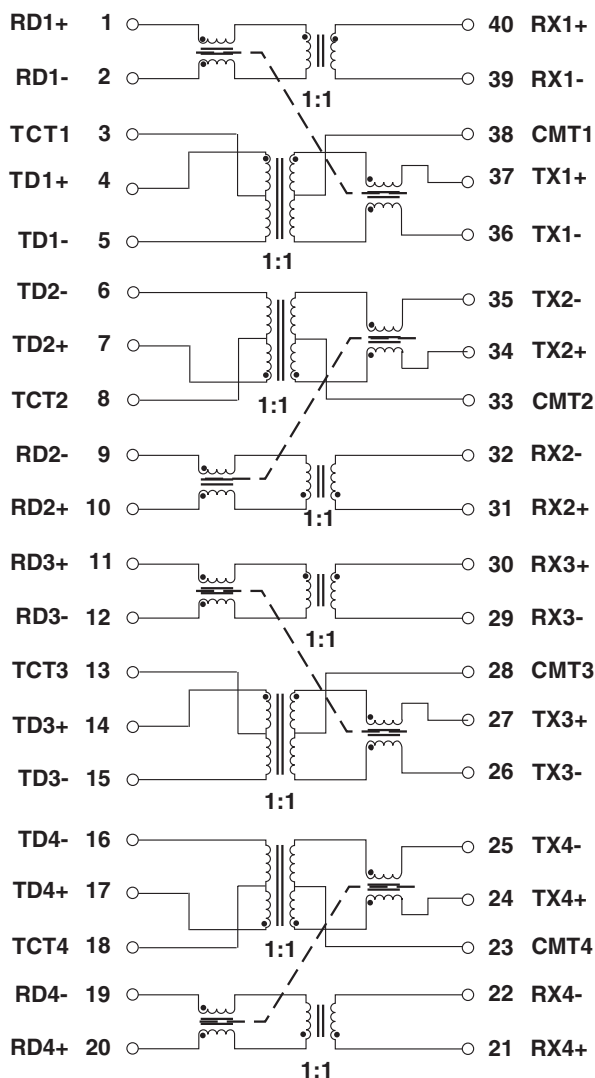
# Star Magnetics™

## Fast Ethernet (10/100) & Gigabit (10/100/1000)

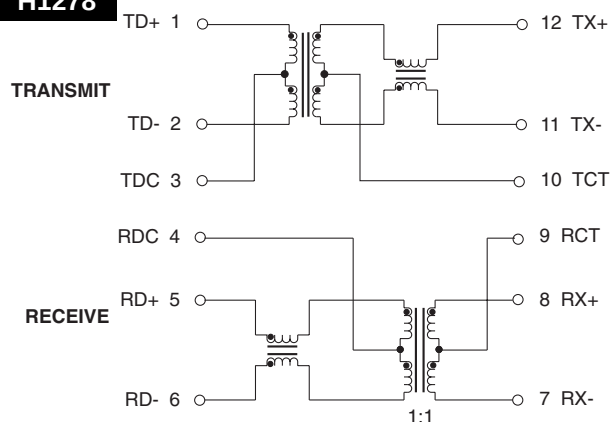


### Schematics (continued)

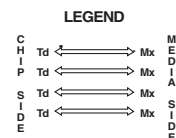
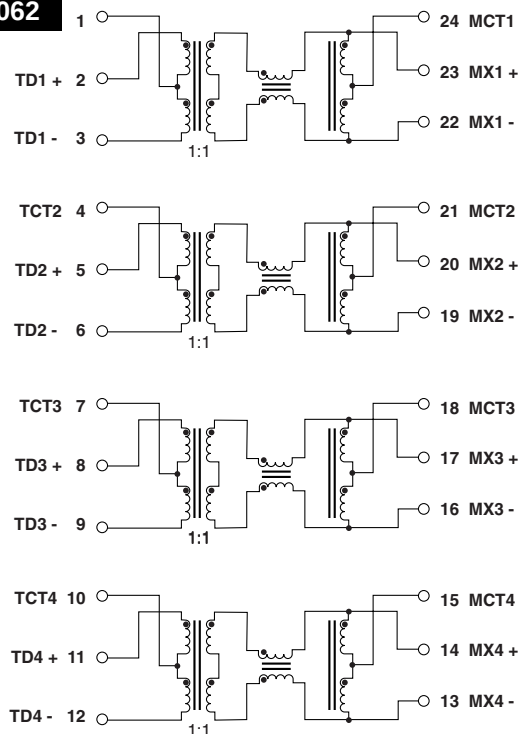
#### H1266



#### H1278



#### H5062



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