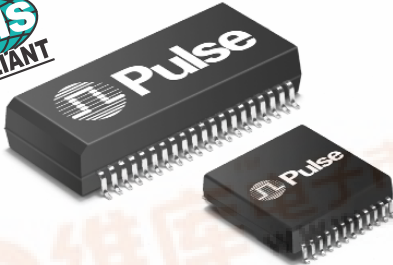


# 10/100BASE-TX DUAL PORT TRANSFORMER MODULES

## For Use with Transceivers Requiring 1:1 Transmit and Receive Turns Ratios



- ④ RoHS-5 peak reflow temperature rating 235°C
- ④ RoHS-6 peak reflow temperature rating 245°C
- ④ Meets IEEE 802.3 specification
- ④ Some models offer AutoMDIX capability

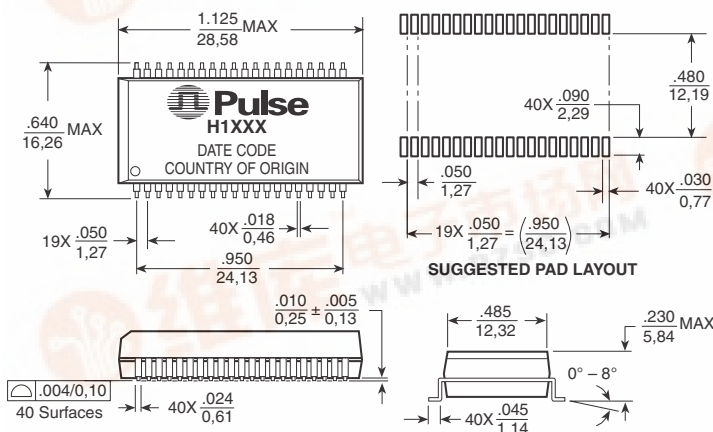
### Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

| RoHS-5 <sup>4</sup><br>Compliant<br>Part<br>Number | RoHS-6 <sup>5</sup><br>Compliant<br>Part<br>Number | Insertion<br>Loss<br>(dB TYP) | Return Loss<br>(dB MIN) |         |       |       | Crosstalk<br>(dB TYP) |      |       |       | Differential to<br>Common Mode<br>Rejection (dB TYP) |         |
|--|--|-------------------------------|-------------------------|---------|-------|-------|-----------------------|------|-------|-------|--|---------|
|  |  |                               | 0.1-100MHz              | 2-30MHz | 40MHz | 50MHz | 60-80MHz              | 1MHz | 30MHz | 60MHz | 100MHz   | 1-60MHz |
| H1026  | —  | -0.5                          | -21                     | -17     | -14.5 | -12   | -65                   | -55  | -45   | -35   | -40  | -30     |
| H1027  | H1027NL <sup>6d</sup>                              | -0.5                          | -21                     | -17     | -14.5 | -12   | -65                   | -55  | -45   | -35   | -53  | -40     |
| H1028  | H1028NL <sup>6d</sup>                              | -0.5                          | -21                     | -17     | -14.5 | -12   | -65                   | -55  | -45   | -35   | -45  | -35     |
| H1049  | H1049 NL <sup>6d</sup>                             | -0.5                          | -21                     | -17     | -14.5 | -12   | -65                   | -55  | -45   | -35   | -45  | -35     |
| H1114  | H1114 NL <sup>6d</sup>                             | -1.2                          | -16                     | -14     | -13   | -12   | -50                   | -45  | -40   | -35   | -37  | -33     |
| H1200  | H1200NL <sup>6d</sup>                              | -1.0                          | -16                     | -14.4   | -13   | -12   | -50                   | -45  | -40   | -35   | -37  | -33     |
| H1174  | H1174 NL <sup>6a</sup>                             | -1.2                          | -18                     | -16     | -14   | -12   | -60                   | -45  | -40   | -35   | -45  | -35     |
| H1270 <sup>2</sup>                                 | H1270NL <sup>2, 6a</sup>                           | -1.2                          | -18                     | -16     | -14   | -12   | -60                   | -45  | -40   | -35   | -45  | -35     |
| HX1294 <sup>3</sup>                                | HX1294NL <sup>3, 6c</sup>                          | -1.2                          | -16                     | -14     | -13.5 | -10   | -55                   | -45  | -40   | -35   | -30  | -20     |

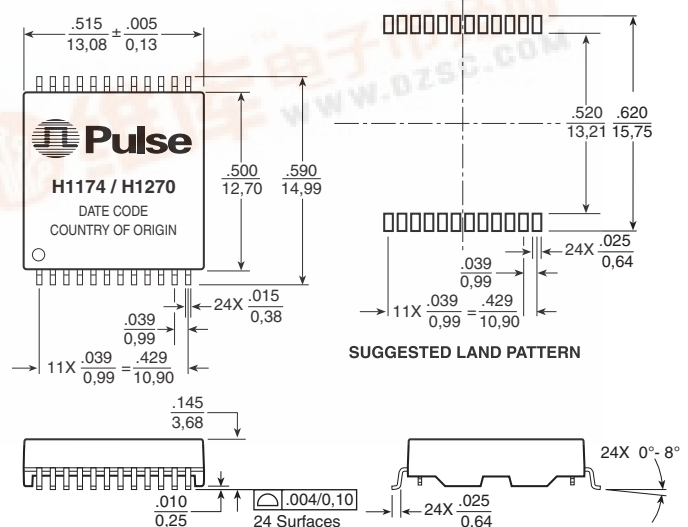
1. All models meet input/output breakdown (Hipot) of 1500 Vrms.
2. Suitable for AutoMDIX applications.
3. Operating Temperature -40°C to +85°C.
4. RoHS-5: Product does not contain 5 out of the 6 banned substances specified in the RoHS directive (product contains lead in applications considered solder).
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).
6. MSL= Moisture Sensitivity Level a=1 b=2 c=3 d=4.

### Mechanicals

#### H1XXX



#### H1174/H1270



Dimensions: Inches  
mm  
Unless otherwise specified, all tolerances are ± .010  
.025



# 10/100BASE-TX DUAL PORT TRANSFORMER MODULES

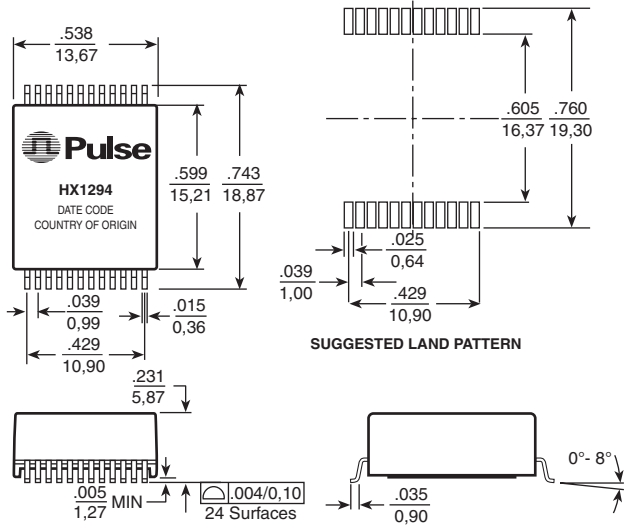
## For Use with Transceivers Requiring 1:1 Transmit and Receive Turns Ratios



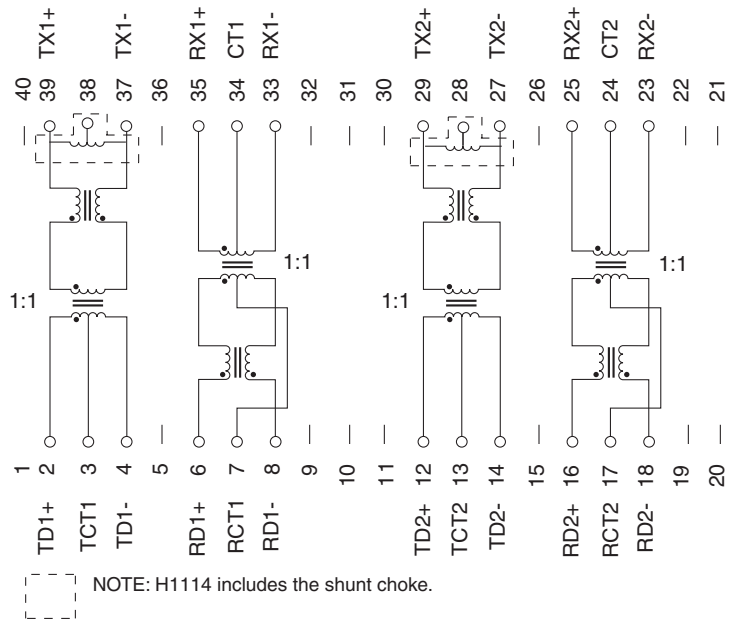
### Mechanicals (continued)

### Schematics

#### HX1294

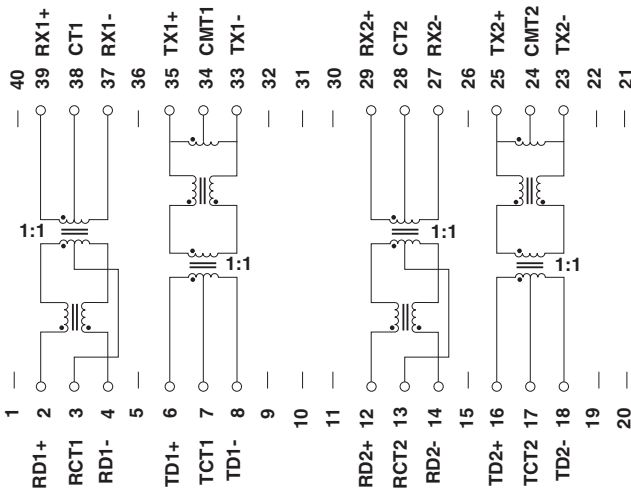


#### H1026, H1114

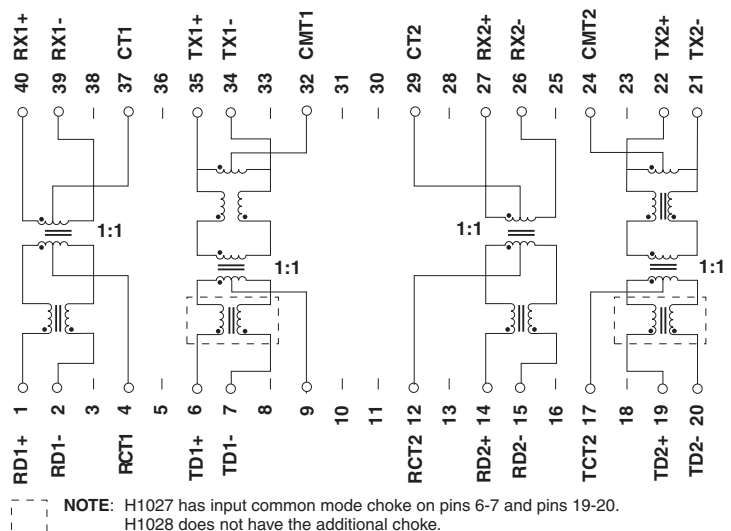


### Schematics (continued)

#### H1049



#### H1027, H1028



**Dual Port Solutions:** The H1027, H1028, H1049, and H1026 are designed to support two RJ-45 connectors. The H1027 and the H1028 have the same pinout. The H1027 has an additional common mode choke on both transmit channels. The H1049 and the H1026 offer different pinouts for design flexibility.

# 10/100BASE-TX DUAL PORT TRANSFORMER MODULES

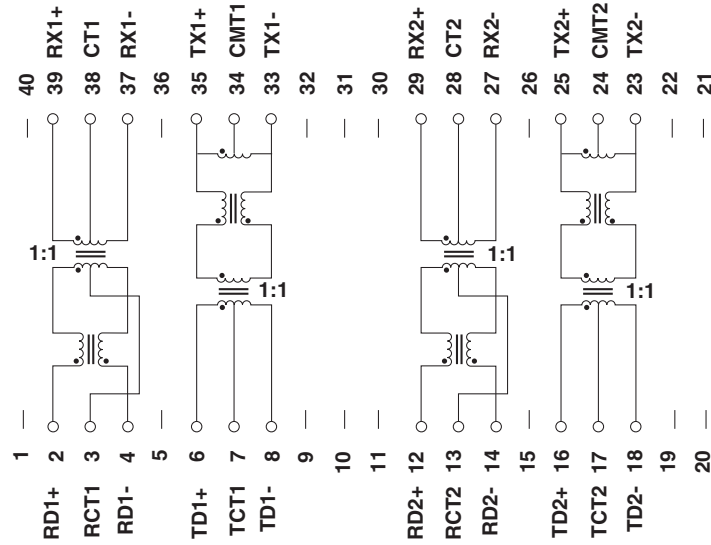
## For Use with Transceivers Requiring 1:1 Transmit and Receive Turns Ratios



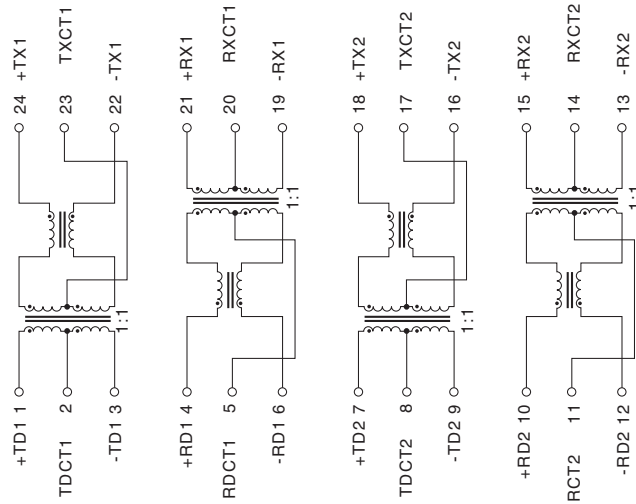
**Pulse**  
A TECHNITROL COMPANY

### Schematics (continued)

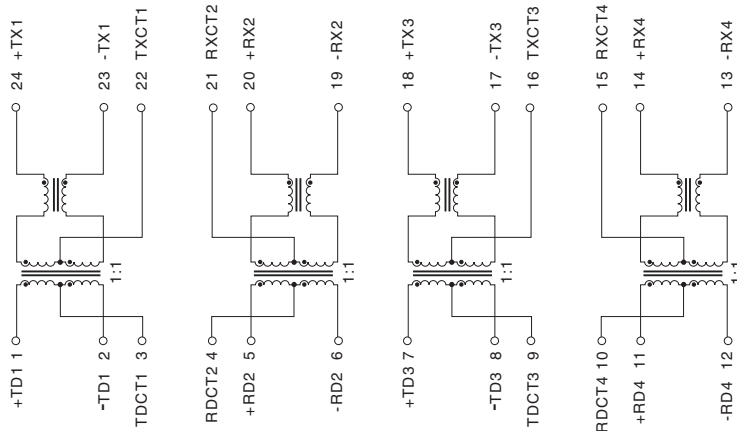
#### H1200



#### H1174



#### H1270, HX1294



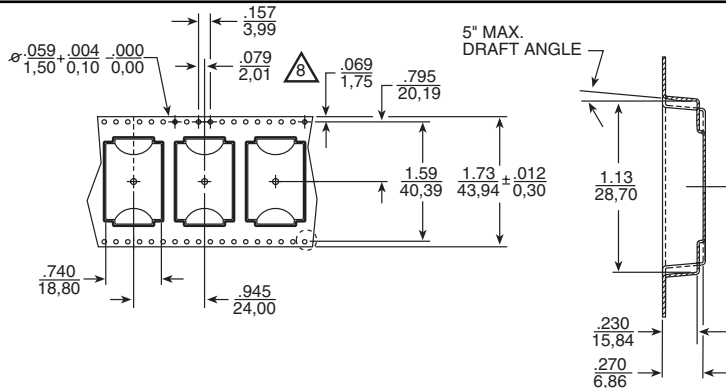
# 10/100BASE-TX DUAL PORT TRANSFORMER MODULES

## For Use with Transceivers Requiring 1:1 Transmit and Receive Turns Ratios



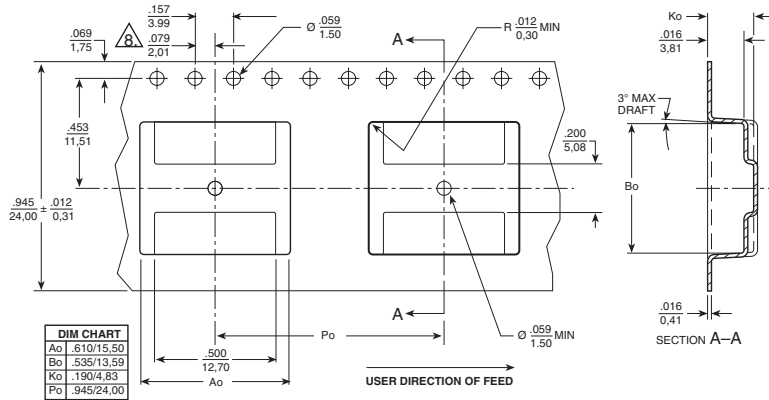
### Tape & Reel Specifications

#### H1XXX



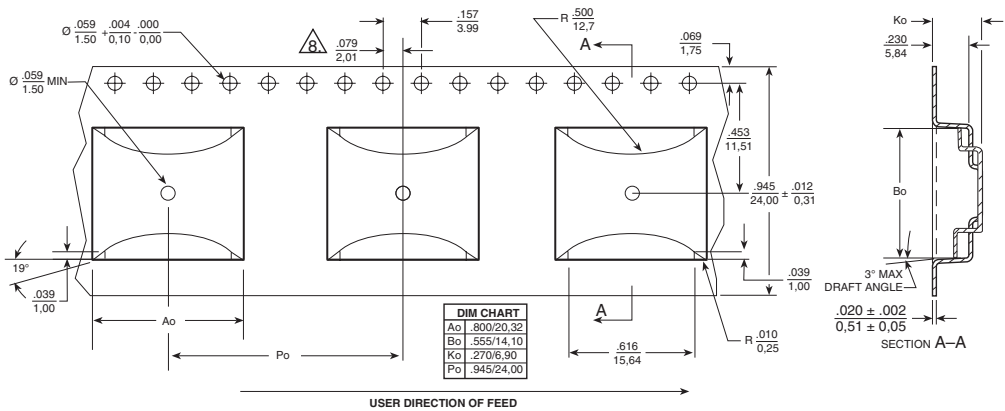
Weight .....4.0 grams TYP  
 Tube ..... .15/tube  
 Tape & Reel ..... .250/reel

#### H1174/H1270



Weight .....1.5 grams TYP  
 Tube ..... .35/tube  
 Tape & Reel ..... .500/reel

#### HX1294



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