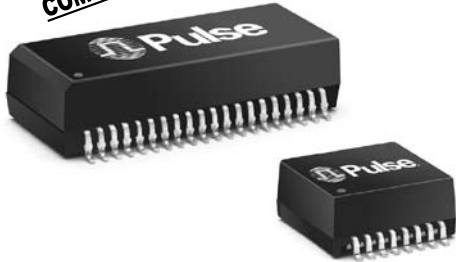


10/100BASE-TX TRANSFORMER MODULES

For Auto MDI/MDIX Applications



- Symmetrical TX and RX channels for Auto MDI/MDIX capability
- Approved for use with the Broadcom BCM5226 and Level One LXT9784
- Meets IEEE 802.3 specification

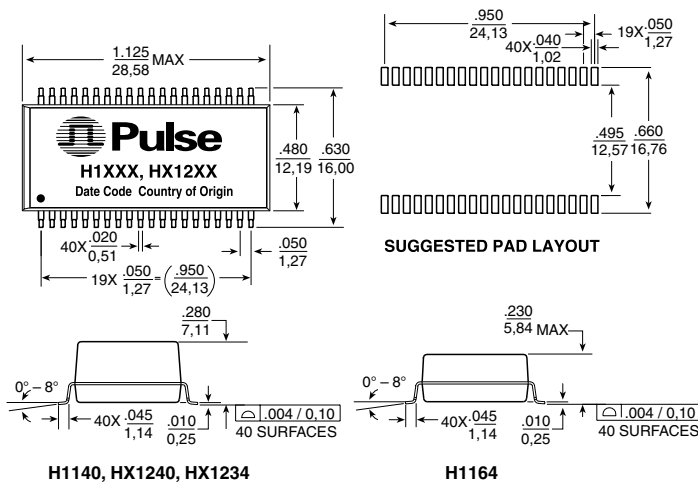
Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

| RoHS-6 ² Compliant Part Number | RoHS-5 ² Compliant Part Number | Insertion Loss (MAX) | Return Loss (dB MIN) | | | | Crosstalk (dB MIN) | | | | Differential to Common Mode Rejection (dB MIN) | | Hipot (Vrms MIN) |
|--|--|----------------------------|-------------------------|---------|-------|-------|-----------------------|------|-------|-------|--|---------|---------------------|
| | | | 0.1-100MHz | 2-30MHz | 40MHz | 50MHz | 60-80MHz | 1kHz | 30MHz | 60MHz | 100MHz | 1-60MHz | |
| H1140NL ^{3c} | H1140 ^{3c} | -1.0 | -18 | -14.4 | -13.1 | -12 | -65 | -50 | -40 | -35 | -40 | -35 | 1500 |
| H1141NL ^{3c} | — | -1.0 | -18 | -14.4 | -13.1 | -12 | -65 | -50 | -40 | -35 | -40 | -35 | 1500 |
| H1164NL ^{3d} | H1164 ^{3d} | -1.0 | -18 | -14.4 | -13.1 | -12 | -55 | -45 | -40 | -33 | -37 | -25 | 1500 |
| HX1234NL ^{1,3c} | HX1234 ^{1,3c} | -1.4 | -18 | -14.4 | -13.1 | -12 | -55 | -45 | -40 | -33 | -37 | -25 | 1500 |
| — | HX1240 ^{3c} | -1.0 | -16.5 | -16 | -15.5 | -12 | -60 | -43 | -38 | -33 | -43 | -27 | 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. H1164T
3. MSL = Moisture Sensitivity Level a=1 b=2 c=3 d=4

Mechanicals

H1140, H1164, HX1234, HX1240



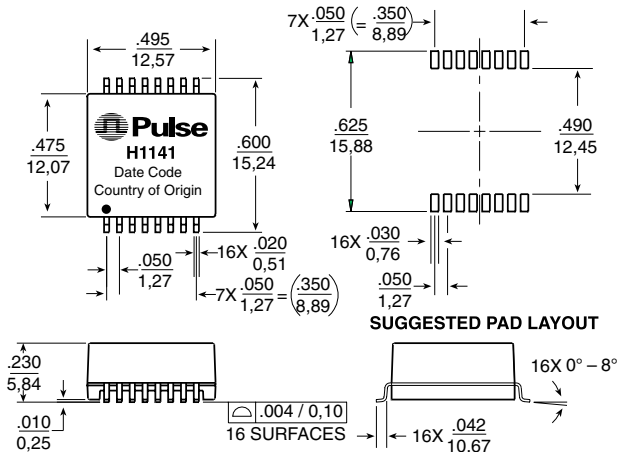
Weight 5.6 grams*
Tape & Reel 250/reel
Tube 15/tube

*H1164 = 4.4 grams

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

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

H1141



Weight 1 gram
Tape & Reel 350/reel
Tube 35/tube

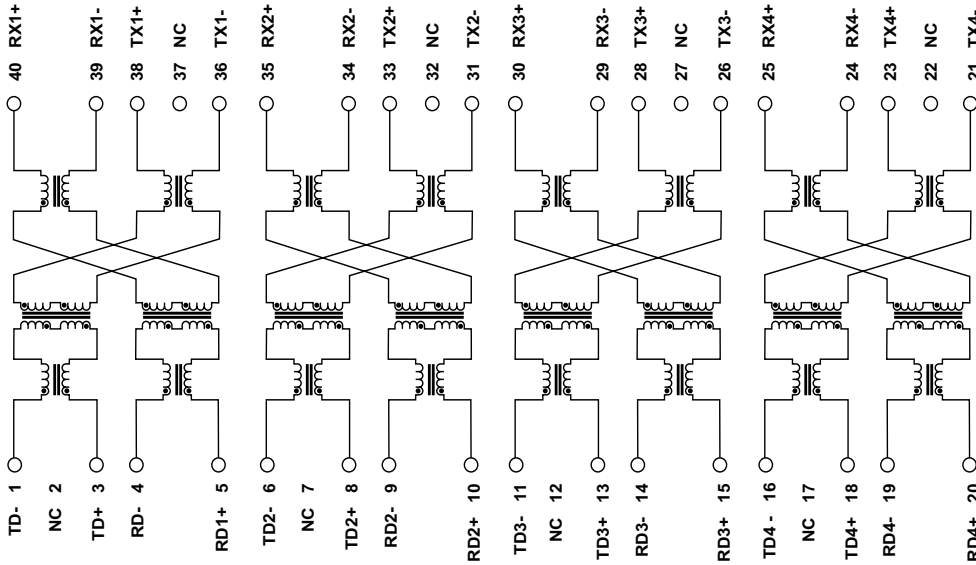
10/100BASE-TX TRANSFORMER MODULES

For Auto MDI/MDIX Applications

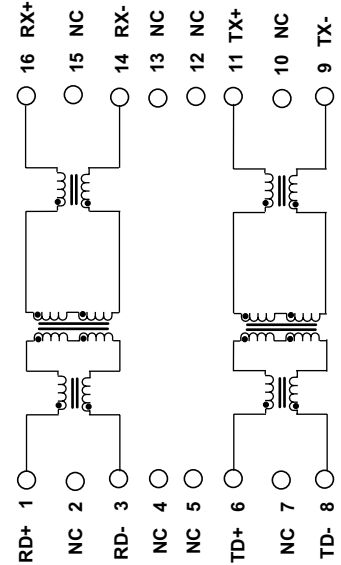


Schematics

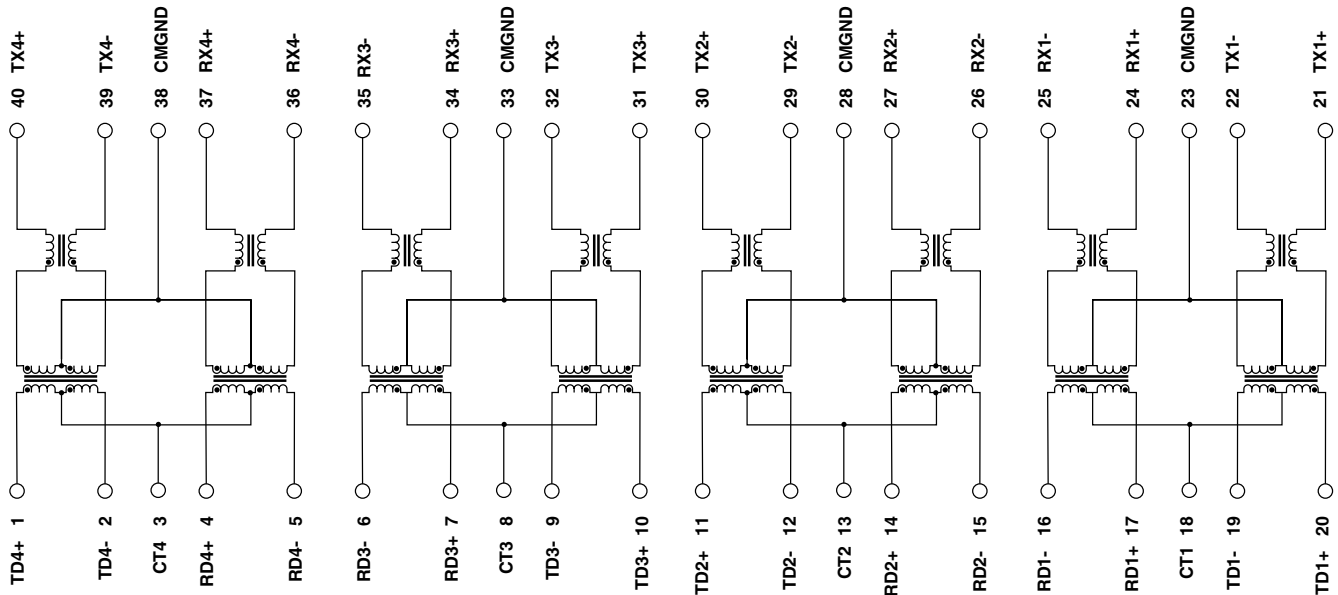
H1140, HX1240



H1141



H1164, HX1234



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