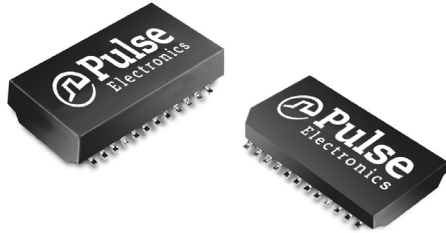


1000Base-T, Single Port Magnetics Modules

Set-top Boxes, Routers, and SOHOs



- RoHS peak reflow temperature rating 245°C
- Small footprint saves board space
- Compliant with IEEE 802.3ab standard for 1000BASE-T

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

| Part Number | Insertion Loss (dB MAX) | Return Loss (dB MIN @ 100 Ω) | | | | Differential to Common Mode Rejection (dB MIN) | | | Crosstalk (dB MIN) | | | Hipot (Vrms MIN) |
|-------------------------|-------------------------|------------------------------|----------|-----------|-----------|--|--------|--------|--------------------|--------|--------|------------------|
| | | 1-100 MHz | 1-30 MHz | 40-50 MHz | 60-80 MHz | 100 MHz | 30 MHz | 60 MHz | 100 MHz | 30 MHz | 60 MHz | |
| H5138NL ² | -1.0 | -18 | -16 | -12 | -10 | -43 | -37 | -33 | -45 | -40 | -35 | 1500 |
| H5149NL ² | -1.0 | -18 | -16 | -12 | -10 | -43 | -37 | -33 | -45 | -40 | -35 | 1500 |
| HX5149NL ^{2,3} | -1.0 | -16 | -14.4 | -12 | -10 | -43 | -37 | -33 | -45 | -40 | -35 | 1500 |

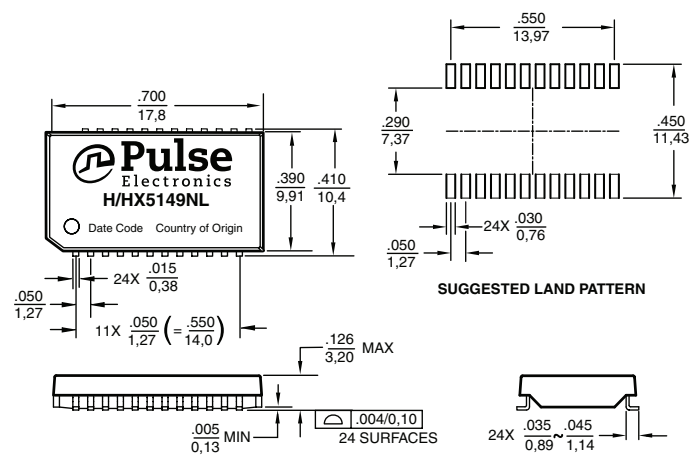
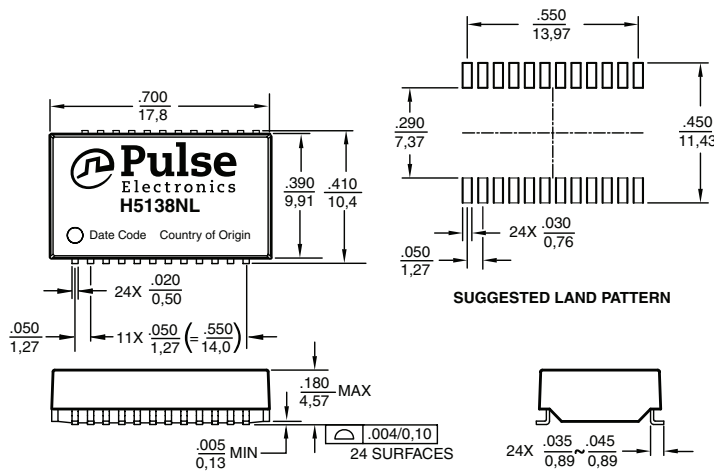
Notes:

- Add the suffix "T" to the end of the part number for Tape & Reel option, e.g. H5138NL becomes H5138NLT.
- MSL = Moisture Sensitivity Level = 1
- Extended operating temperature (-40°C to +85°C)

Mechanicals

H5138NL

H5149NL, HX5149NL



Weight0.4 grams
 Tape & Reel400
 Tube25

Dimensions: Inches mm Unless otherwise specified, all tolerances are ± .010 / 0,25

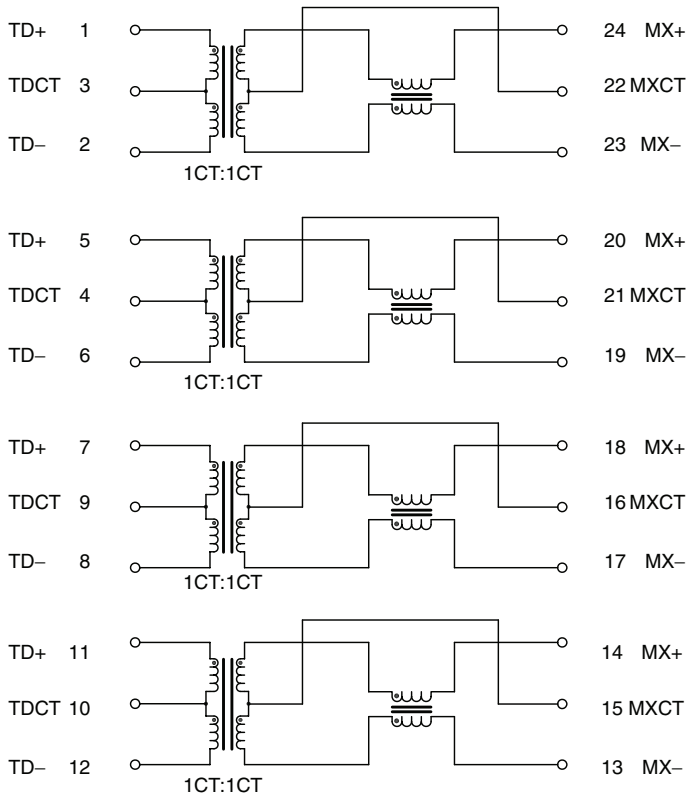
Weight0.4 grams
 Tape & Reel400
 Tube25

1000Base-T, Single Port Magnetics Modules

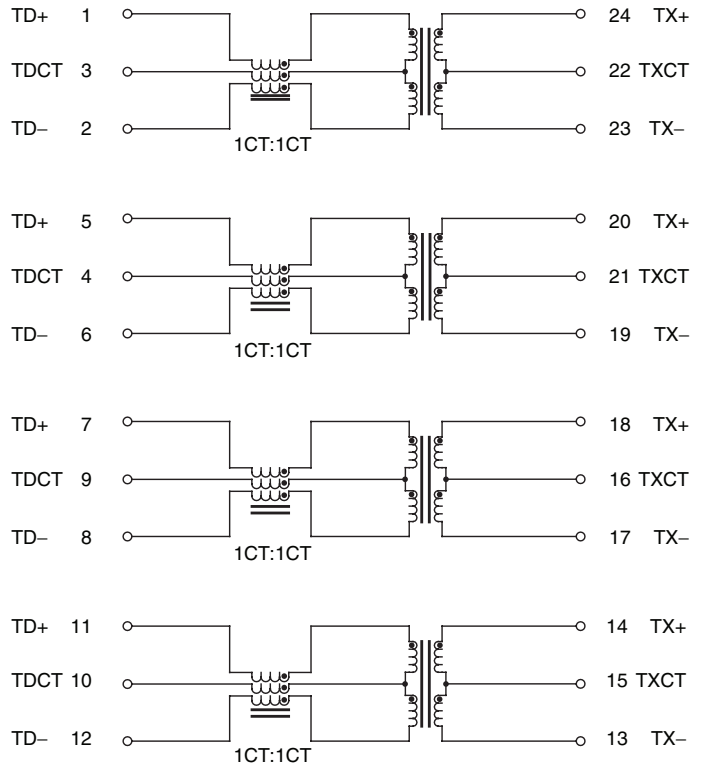
Set-top Boxes, Routers, and SOHOs

Schematics

H5138NL



H5149NL, HX5149NL



For More Information:

Americas - prodinfo@networkamericas@pulseelectronics.com | Europe - comms-Apps-Europe@pulseelectronics.com | Asia - prodinfo@networkapac@pulseelectronics.com

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2019. Pulse Electronics, Inc. All rights reserved.