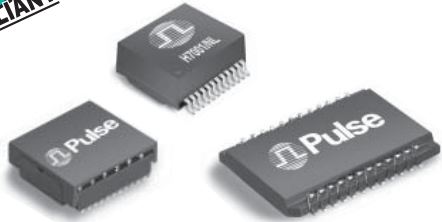


10GBASE-T MAGNETICS MODULES

Designed to Support 10GBASE-T Transceivers



- Compliant with IEEE 802.3 standard
- Qualified with top 10Gig PHY Manufacturer
- RoHS peak reflow temperature rating: 245°C
- Low profile package for PCI Express
- Fine-tuned magnetics to specific PHY vendors

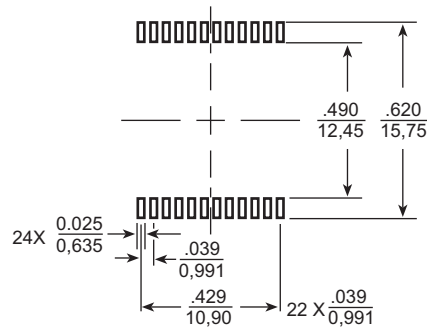
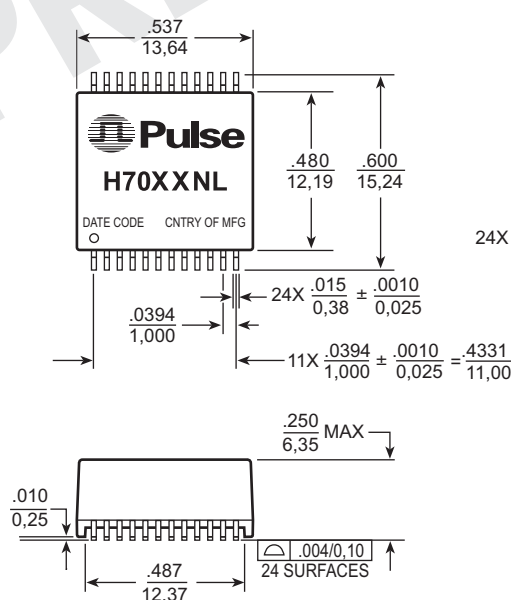
Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

RoHS Compliant Part Number	Insertion Loss (dB or better)		Return Loss (dB or better)		Common to Differential Mode Rejection (dB or better)		Crosstalk (dB or better)		Hipot (VRMS MIN)
	100 kHz	1-500 MHz	1-40 MHz	40-500 MHz	1-250 MHz	250-500 MHz	1-100 MHz	100-500 MHz	
H7001NL	-3.0	-1.0 (-0.6 dB TYP)	-18	-17+ 10*LOG(f/40)	-30	-22	-40	-30	1500
H7018NL	-3.0	-1.0 (-0.6 dB TYP)	-18	-17+ 10*LOG(f/40)	-30	-22	-40	-30	1500
H7019NL	-3.0	-1.0 (-0.6 dB TYP)	-18	-17+ 10*LOG(f/40)	-30	-22	-40	-30	1500
H7500NL	-3.0	-1.0 (-0.6 dB TYP)	-18	-17+ 10*LOG(f/40)	-30	-22	-40	-30	1500
H7800NL	-3.0	-1.0 (-0.6 dB TYP)	-18	-17+ 10*LOG(f/40)	-30	-22	-40	-30	1500

1. For Tape & Reel packaging, add a "T" suffix at the end of the part number, e.g. H7001NLT.

Mechanicals

H7001NL, H7018NL, H7019NL



SUGGESTED PAD LAYOUT

Dimensions: Inches
mm

Unless otherwise specified,
all tolerances are ± .010
0.25

Weight 1.2 grams
Tube 35

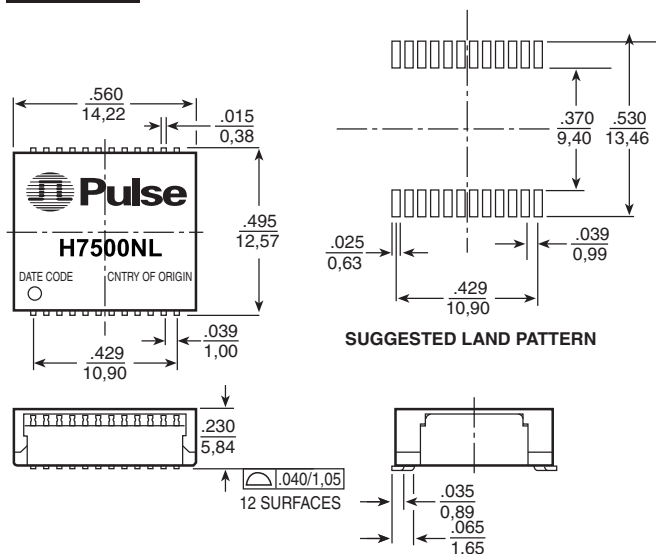
10GBASE-T MAGNETICS MODULES

Designed to Support 10GBASE-T Transceivers



Mechanicals (continued)

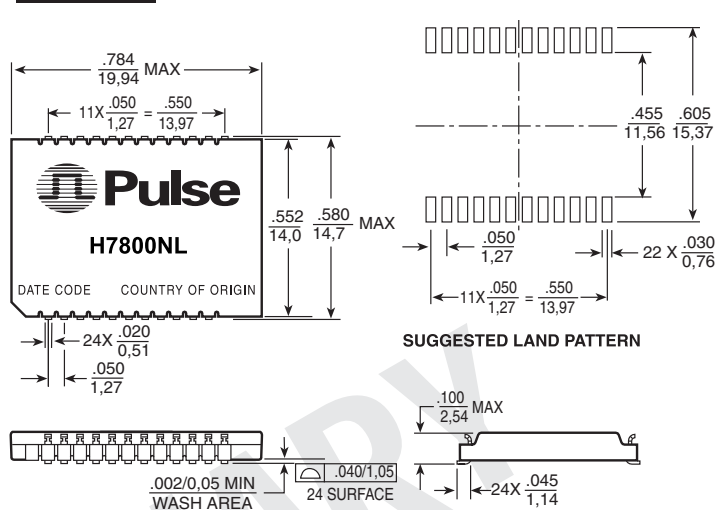
H7500NL



Weight 1.2 grams
Tape & Reel 400
Tube 30

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

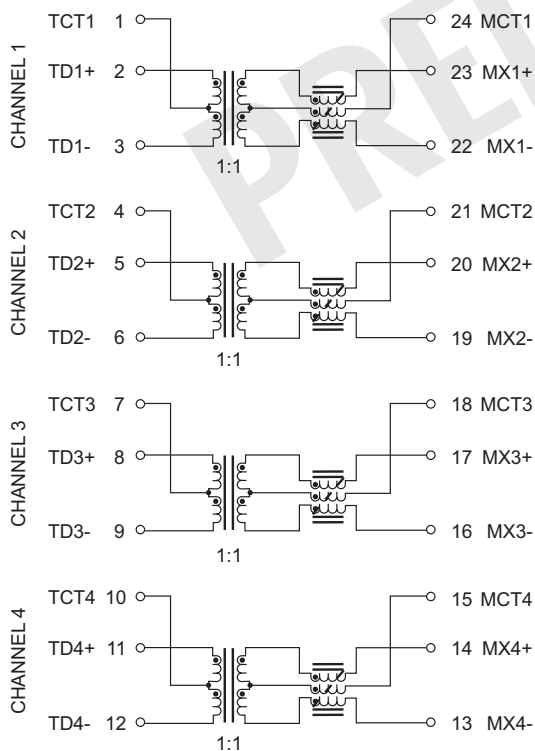
H7800NL



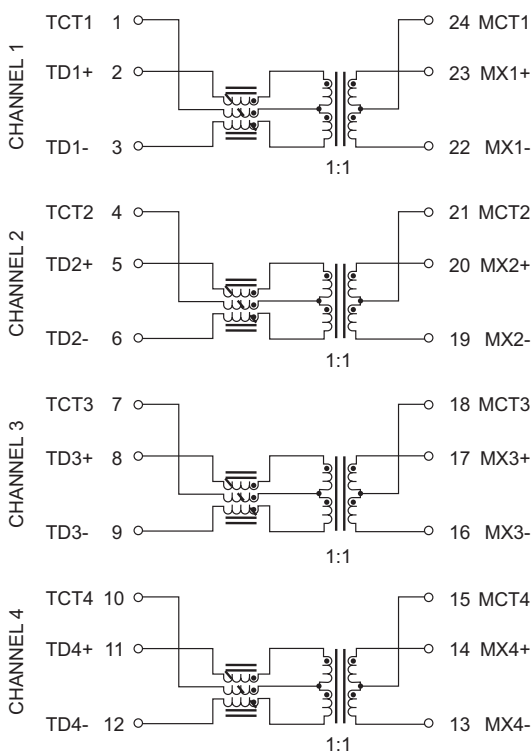
Weight 1.0 grams
Tape & Reel 700
Tube 20

Schematic

H7018NL



H7019NL



10GBASE-T MAGNETICS MODULES

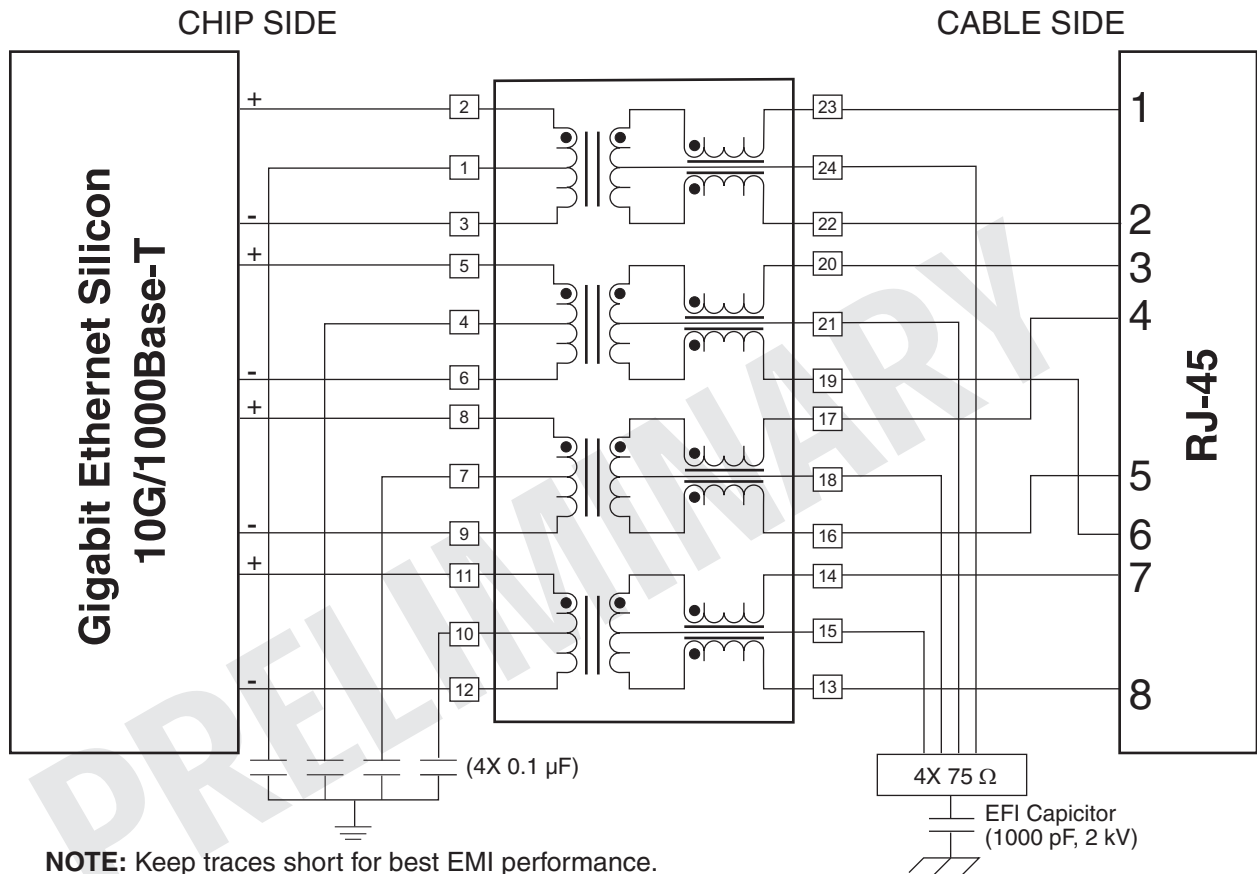
Designed to Support 10GBASE-T Transceivers



Application Circuit

H7001NL, H7500NL, H7800NL

Gigabit Circuit



The above circuit is a simple interface for a gigabit transformer connection between the silicon and connector. It is highly recommended that the cable side center taps of each transformer be terminated to 75 Ω resistors and that the four center taps be terminated to an EFI capacitor prior to ground termination.

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