

FIBRE CHANNEL DUAL TRANSFORMERS

For Use with 75 Ω Coaxial or
150 Ω STP Cable



- Designed for fast rise time and low baseline wander
- IC grade transfer-molded package withstands 235°C IR reflow
- Pick & Place compatible

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

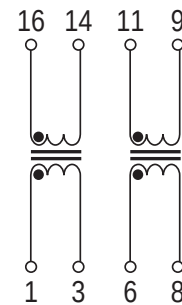
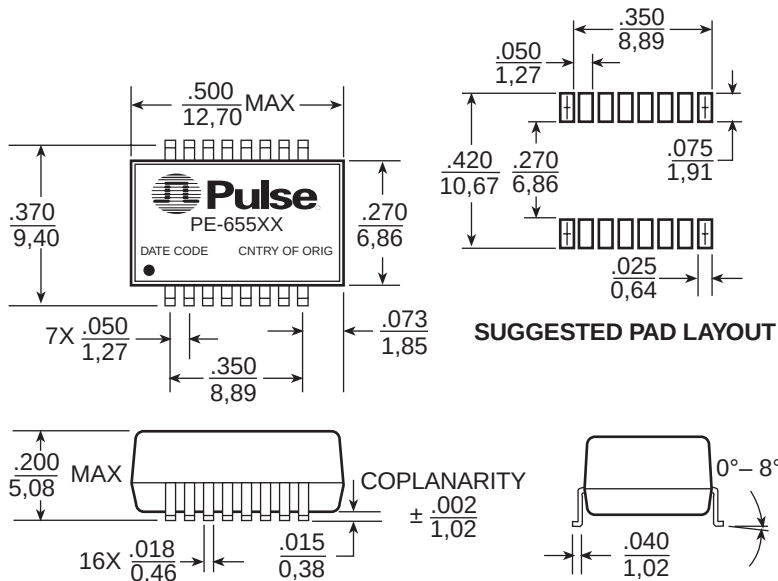
Part Number	Turns Ratio ($\pm 5\%$)	Primary Inductance OCL (μH MIN)	Rise Time @ 20-80% (ns MAX)	C _{ww} (pF MAX)	L _L sec (μH MAX)	DCR (Ω MAX)	Hipot (Vrms MIN)
PE-65506	1:1	30.0	1.6	5.0	.10	.20	2000
PE-65507	1:1	15.0	0.8	5.0	.10	.20	2000
PE-65508	1:1	7.5	0.5	5.0	.10	.20	2000
PE-65510	1:1	60.0	2.0	5.5	.10	.20	2000

Modules are packaged in tubes unless Tape & Reel is specified. Add the suffix "T" (such as PE-65506T) for Tape & Reel orders.

Mechanical

Schematic

PE-655XX



Selection Table

Baud Rate (MHz)	Coax Cable (75 Ω)	STP Cable (150 Ω)
133	PE-65506	PE-65510
266	PE-65507	PE-65506
531	PE-65508	—

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

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

Weight 1.0 grams
Tape & Reel600/reel
Tube40/tube

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The isolation transformers protect the station from static charges that may develop on the cable and prevent ground loop currents from being transferred between stations. When coaxial links are used, the transformers also provide a balance to single-ended connections between the transmitter/receiver IC and the coax.

The dual package allows connection of both the transmit and receive channels, as shown in the application circuit below. Surface mount packaging allows a cost effective solution while providing over -40 dB of crosstalk attenuation out to 800 MHz. The transformers are available in either tubes or Tape & Reel packaging.

Typical Application Circuit for Coax Cable Transmission

This diagram illustrates a typical application circuit for coax cable transmission, showing two configurations: a TX-to-RX path and an RX-to-TX path. The circuit includes a TX (Transmitter) and RX (Receiver) block, an EQUALIZER, and two PE-655XX modules. The TX and RX blocks have terminals TX, TY, RX, and RY. The circuit is powered by a +5V supply and ground. The TX and RX blocks are connected to the EQUALIZER and the PE-655XX modules. The PE-655XX modules are connected to the EQUALIZER and the TX and RX blocks. The circuit includes various components such as capacitors (0.1 μF), resistors (270 Ω, 37.5 Ω), and a 75 Ohm COAXIAL CONNECTOR. The TX and RX blocks are connected to the EQUALIZER and the PE-655XX modules. The PE-655XX modules are connected to the EQUALIZER and the TX and RX blocks. The circuit includes various components such as capacitors (0.1 μF), resistors (270 Ω, 37.5 Ω), and a 75 Ohm COAXIAL CONNECTOR.

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