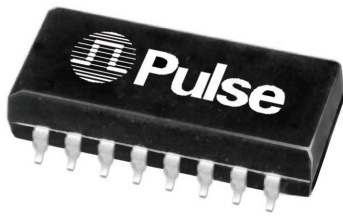


COPPERHEAD™ HIGH SPEED DUAL TRANSFORMERS



- Compliant with ANSI X3T111, Fiber Channel, FC-PH-3 for quarter/full speed applications, SMPTE, IEEE1394 Firewire
- Moisture sensitivity Level 3
- Pick and place compatible
- IC grade package withstands 225°C peak temperature profile
- AS9100 Certified (Based on and including ISO 9001:2000)

Electrical Specifications @ 25°C — Operating Temperature -55°C to +125°C

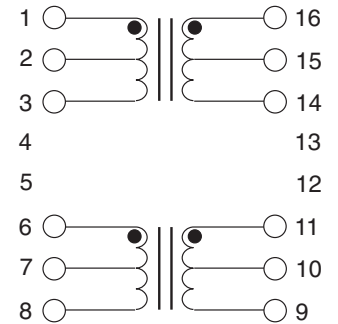
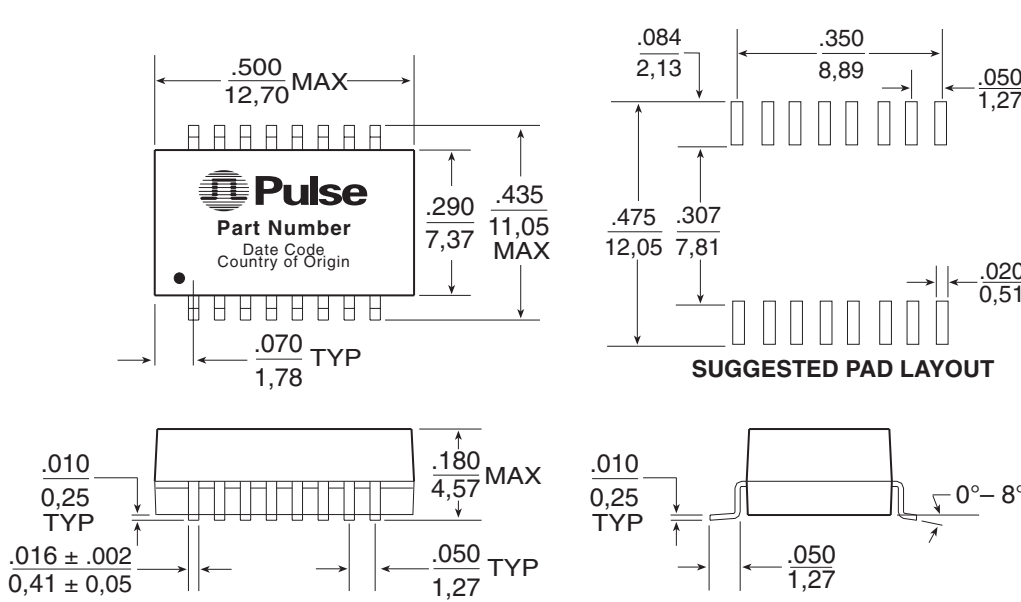
Part Number	Turns Ratio (±5%)	Primary Inductance (μH MIN)	Rise Time @ 20% to 80% (pS MAX)	DC Resistance (Ω MAX)	Hi-Pot (Vrms MIN)	Insertion Loss (dB MAX)	Application Nominal Bit Rate (Mbaud)
T-330SCT	1CT:1CT	26 @ 1Vrms, 100kHz	350	0.2	1,500	-1.5 @ 15-165MHz	265.6 (1/4 speed)
T-531SCT	1CT:1CT	7.5 @ 1Vrms, 100kHz	325	0.2	1,500	-2.0 @ 50-265MHz	531 (half speed)
T-1062SCT	1CT:1CT	3.75 @ 1Vrms, 100kHz	280	0.2	1,500	-2.0 @ 100-531MHz	1,062.5 (full speed)
T-1250SCT	1CT:1CT	3.75 @ 1Vrms, 100kHz	280	0.2	1,500	-2.0 @ 125-650MHz	1,250
T-1485SCT	1CT:1CT	3.75 @ 1Vrms, 100kHz	280	0.2	1,500	-2.0	1,485 (SMTPE)
T-3200SCT	1:1	0.70	200	0.2	1,500	-4.5	3,200

NOTES: 1. To order a RoHS compliant part, add the suffix "NL" to the part number, i.e. T-330SCT becomes T-330SCTNL.
 2. Add suffix "T" to part number for Tape & Reel package (i.e. T-330SCTT).

Mechanical

Schematic

T-330SCT, T-531SCT, T-1062SCT, T-1250SCT and T-1485SCT



Weight 1.0 grams
 Tape & Reel 400/reel
 Dimensions: Inches
 mm
 Unless otherwise specified,
 all tolerances are ± .005
 0,13

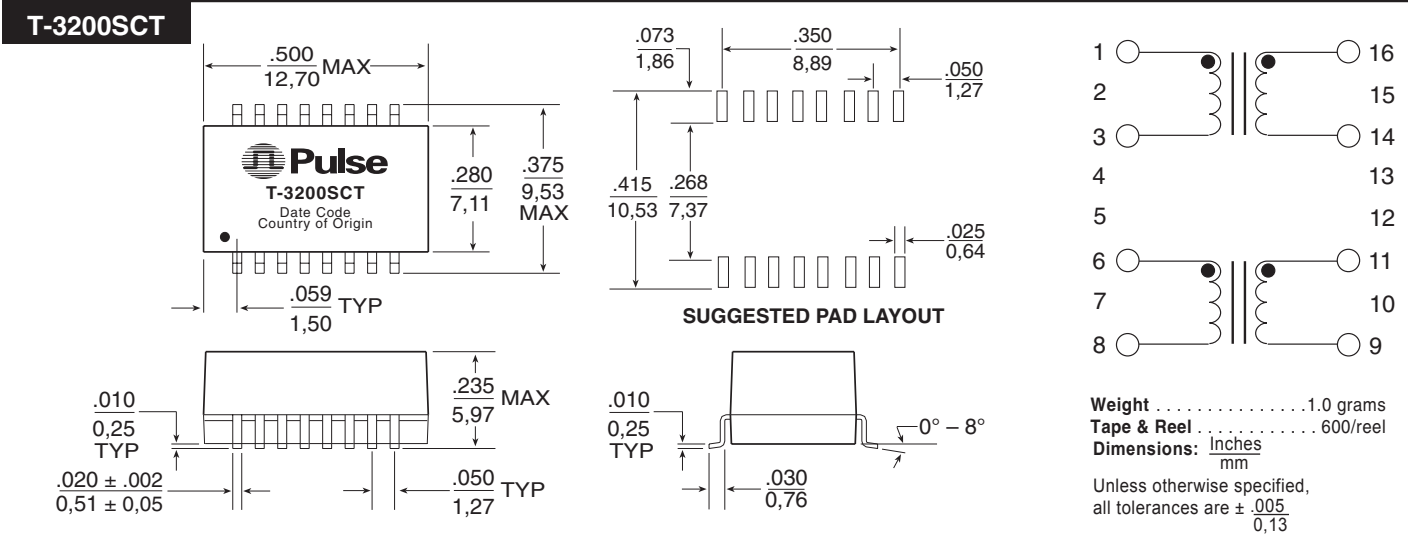
COPPERHEAD™ HIGH SPEED DUAL TRANSFORMERS



Pulse
A TECHNITROL COMPANY
Military / Aerospace Division

Mechanical

Schematic



Application Notes

Pulse Specialty Components has designed Fibre Channel dual transformers specifically for point to point coupling to 150 twinax cable. The isolation transformers protect the station from static charges that may develop on the cable, and prevents ground loop currents from being transferred between stations. The devices have also been designed to provide common mode rejection within the transmission

band and thus reduce EMI. The wide bandwidth of these devices minimizes data dependent jitter by providing fast signal rise times. Low-end bandwidth also minimizes base-line wander, another contributor to jitter. The dual package allows connection of both transmit and receive channels, as shown in the application circuit below. Surface-mount packaging also allows a cost-effective solution.

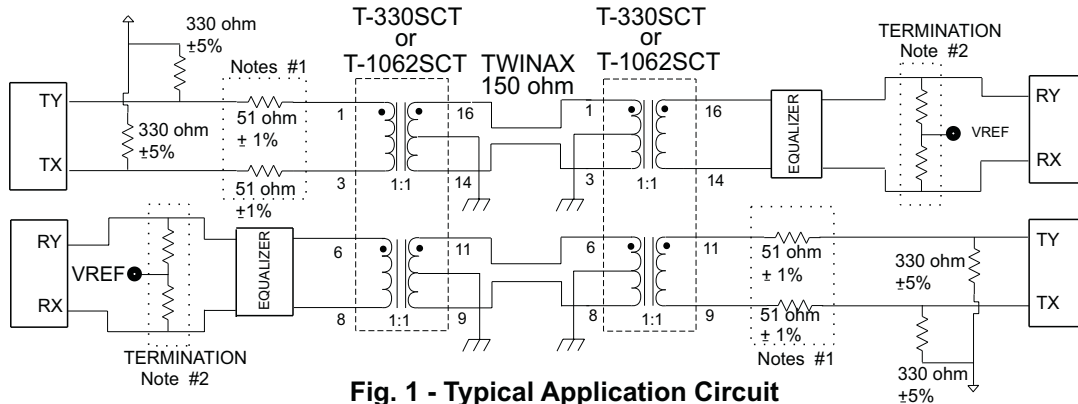


Fig. 1 - Typical Application Circuit

1. The transformer, 51Ω resistors, and the impedance of the driver are matched to achieve the best return loss (S11) for the transmitter of the 150Ω system.
2. The total impedance of termination resistor network is 150 Ω.
3. When laying out PCB, transmission line methods must be utilized to maintain return loss and signal integrity. Transformer must be

- located within .50" of the DB9 connector.
4. It is recommended that the center tap (CT) of transformer(s), cable side, be connected to earth/chassis (cable shield) ground either directly or via a transient voltage suppressor (TVS) type component and earth/chassis ground should be "AC-coupled" to signal (digital) ground through a .027uF, 500V capacitor.

For More Information:

Pulse Worldwide Headquarters

Two Pearl Buck Court
Bristol, PA 19007
U.S.A.

Pulse Europe

Einsteinstrasse 1
D-71083 Herrenberg
Germany

Pulse China Headquarters

B402, Shenzhen Academy of
Aerospace Technology Bldg.
10th Kejinan Rd.
High-Tech Zone
Nanshan District
Shenzhen, PR China 518057
TEL: 86 755 33966678
FAX: 86 755 33966700

Pulse North China

Room 2704/2705
Super Ocean Finance Ctr.
2067 Yan An Rd. West
Shanghai 200336
China

Pulse South Asia

135 Joo Seng Rd.
#03-02
PM Industrial Bldg.
Singapore 368363

Pulse North Asia

No. 26, Kao Ching Rd.
Yang Mei Chen
Taoyuan Hsien
Taiwan
R. O. C.

www.pulseeng.com

Tel: 215 781 6400

Fax: 215 781 6403

Tel: 49 7032 7806 0

Fax: 49 7032 7806 135

Tel: 86 21 62787060

Fax: 86 2162786973

TEL: 65 6287 8998

FAX: 65 6280 0080

Tel: 886 3 4643715

Fax: 886 3 4641911

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, 2010. Pulse Engineering, Inc. All rights reserved.