

T3/DS3/E3/STS-1 TRANSFORMERS

Dual SMT, Extended Temperature Range



- Dual SMT package contains both transmit and receive transformers
- Operating temperature of -40°C to +85°C
- Models matched to leading transceiver ICs
- Return loss meets requirements of G.703
- 1500Vrms isolation per UL1459 and UL1950

Electrical Specifications @ 25°C — Operating Temperature -40°C to +85°C

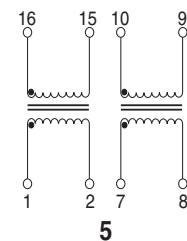
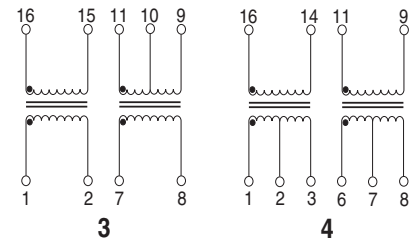
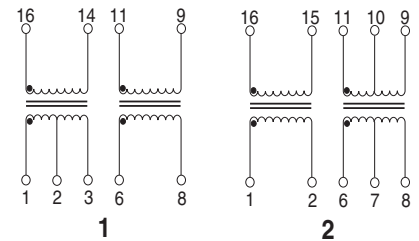
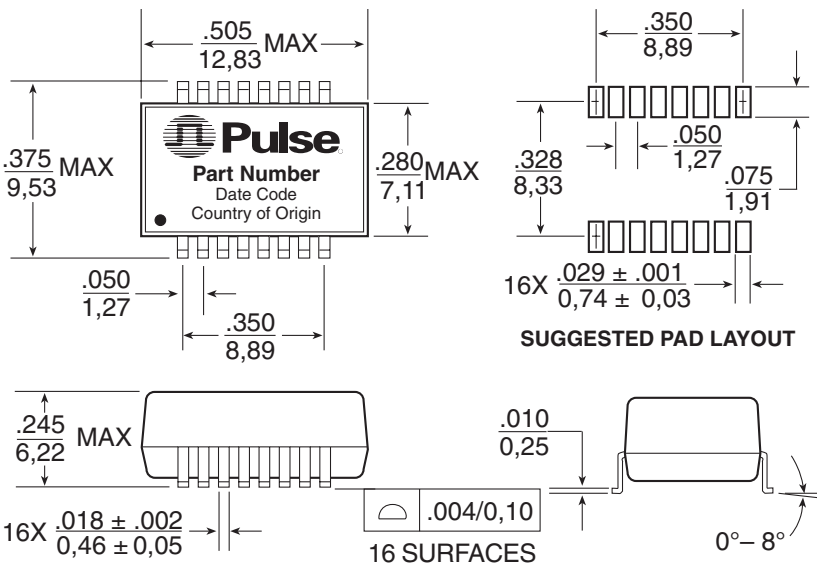
RoHS-5 Compliant Part No.	RoHS-6 Compliant Part No.	Turns Ratio (±2%)		OCL Primary @ 25°C (μH MIN)		L _L (μH MAX)		C _{w/w} (pF MAX)		Isolation Voltage (V _{rms} MIN)	Package/Schematic	Primary Pins	
		TX	RX	TX	RX	TX	RX	TX	RX			TX	RX
T3020	T3020NL	1:2CT	1:1	40	100	.120	.120	10	10	1500	BH/1	16-14	6-8
T3021	T3021NL	1:2CT	1:2CT	40	40	.100	.100	10	10	1500	BH/4	16-14	11-9
T3023	T3023NL	1:1	1:1	40	40	.110	.110	10	10	1500	BH/5	1-2	7-8
TX3025	TX3025NL	1CT:1CT	1:1	100	100	.120	.120	10	10	1500	BH/2	6-8	16-15
TX3026	TX3026NL	1:2CT	1:1	100	100	.120	.120	10	10	1500	BH/3	7-8	16-15

NOTE: Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (ex: T3020T and T3020NLT).

Mechanicals

Schematics

BH



Weight1.0 grams
Tape & Reel600/reel
Tube40/tube

Dimensions: $\frac{\text{Inches}}{\text{mm}}$
Unless otherwise specified, all tolerances are $\pm \frac{.010}{0.25}$

T3/DS3/E3/STS-1 TRANSFORMERS

Dual SMT, Extended Temperature Range



Application Notes

1. The transformers have been developed for use as transmit and receive transformers in T3 or DS3 links, using bit rates of 44.736Mbps and B3ZS coding on coaxial cable. The characteristics allow compliance with the pulse templates of CCITT G.703 as well as ATT T.A.34. The transformers are also suitable for the E3 interface at 34.368Mbps with HDB3 coding or STS-1 applications, at 51.84Mbps according to Bellcore TA-NWT-000253.
2. Bandwidth specifications are typical in a 75Ω system. Return loss meets the requirements of G.703. Materials used in the products are UL94-V0 recognized. Products meet the requirements of IEC 695-2-2 (Needle Flame Test).
3. For those applications requiring a 1:1 turns ratio on the transmit side, use only one half of the secondary (2CT) winding.
4. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. TX3026T).
5. For other T3/DS3/E3/STS-1 Transformers, please see data sheets **T606**, **T619**, **T672**, **T663** and **T668**.
6. **Transformer Selection Guide** - Please contact Pulse Applications Engineering or see our website for the latest Pulse Transformer Selection Guide.

For More Information:

Pulse Worldwide Headquarters

12220 World Trade Dr.
San Diego, CA 92128
U.S.A.

www.pulseeng.com

TEL: 858 674 8100

FAX: 858 674 8262

Pulse Europe

Einsteinstrasse 1
D-71083 Herrenberg
Germany

Tel: 49 7032 7806 116

Fax: 49 7032 7806 135

Pulse China Headquarters

No. 1
Industrial District
Changan, Dongguan
China

Tel: 86 769 85538070

Fax: 86 769 85538870

Pulse North China

Room 1503
XinYin Building
No. 888 YiShan Rd.
Shanghai 200233
China

Tel: 86 21 54643211/2

Fax: 86 21 54643210

Pulse South Asia

150 Kampong Ampat
#07-01/02
KA Centre
Singapore 368324

Tel: 65 6287 8998

Fax: 65 6280 0080

Pulse North Asia

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

Tel: 886 3 4641811

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, 2006. Pulse Engineering, Inc. All rights reserved.

www.pulseeng.com

T655.C (6/06)