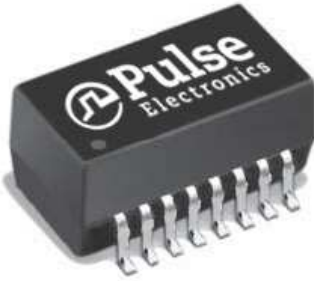


# T3/DS3/E3/STS-1 TRANSFORMERS

Dual SMT, Extended Temperature Range



- RoHS peak reflow temperature rating: 245°C
- 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
- 1500 Vrms isolation per UL1459 and UL195 0

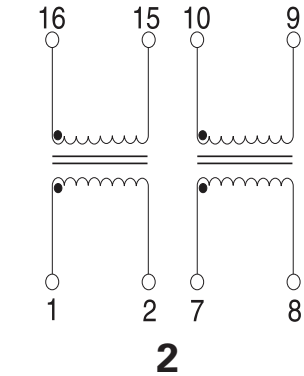
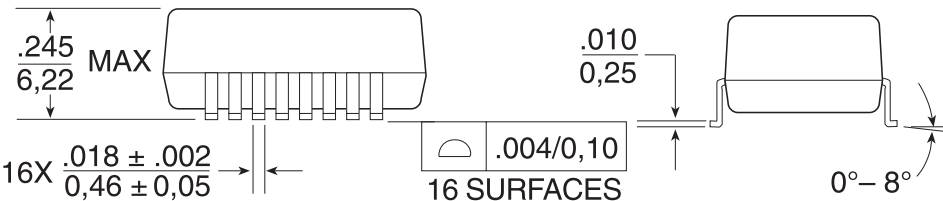
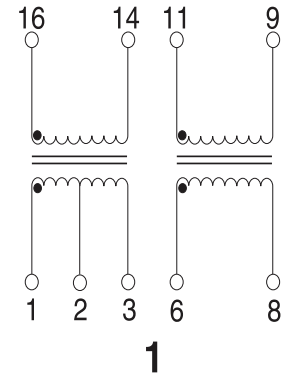
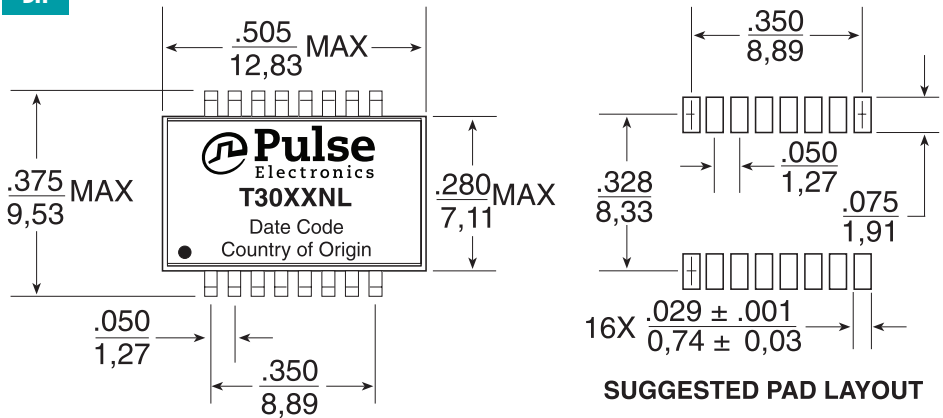
Electrical Specifications @ 25°C - Operating Temperature -40°C to +85°C

RoHS-6 Compliant Part Number	Turns Ratio (±2%)		OCL Primary @ 25°C (±2%)		L <sub>L</sub> (μH MAX)		C <sub>ww</sub> (pF MAX)		Isolation Voltage (Vrms MIN)	Package/Schematic	Primary Pins	
	TX	RX	TX	RX	TX	RX	TX	RX			TX	RX
T3020NL	1:2CT	1:1	40	100	.120	.120	10	10	1500	BH/1	16-14	6-8
T3023NL	1:1	1:1	40	40	.110	.110	10	10	1500	BH/1	1-2	7-8

## Mechanical

## Schematics

BH



Weight .....1.0 grams  
Tape & Reel .....600/reel  
Tray .....40/tray

Dimensions: Inches/mm

Unless otherwise specified, all tolerances are ± .010/0,25

USA 858 674 8100

Germany 49 7032 7806 0

Singapore 65 6287 8998

Shanghai 86 21 62787060

China 86 755 33966678

Taiwan 886 3 4356768

# 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.A.34. The transformers are also suitable for 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 75 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 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. T323NLT).
5. For other T3/DS3/E3/STS-1 Transformers, please see data sheets T606, T672, T663 and T668.
6. Transformer Selection Guide - Please contact Pulse Applications Engineering or see the Pulse web site Data Sheet Menu to find the latest Transformer Selection Guide.

## For More Information

### Pulse Worldwide Headquarters

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

Tel: 858 674 8100  
Fax: 858 674 8262

### Pulse Europe

Einsteinstrasse 1  
D-71083 Herrenberg  
Germany

Tel: 49 7032 78060  
Fax: 49 7032 7806 135

### Pulse China Headquarters

B402, Shenzhen Academy of  
Aerospace Technology Bldg.  
10th Kejinan Road  
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 Road  
West  
Shanghai 200336  
China

Tel: 86 21 62787060  
Fax: 86 2162786973

### Pulse South Asia

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

Tel: 65 6287 8998  
Fax: 65 6287 8998

### Pulse North Asia

3F, No. 198  
Zhongyuan Road  
Zhongli City  
Taoyuan County 320  
Taiwan R. O. C.

Tel: 886 3 4356768  
Fax: 886 3 4356823 (Pulse)  
Fax: 886 3 4356820 (FRE)

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