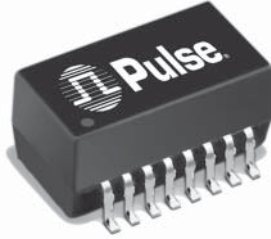








# T3/DS3/E3/STS-1 TRANSFORMERS

## 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

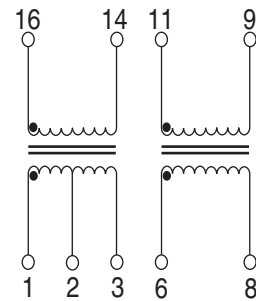
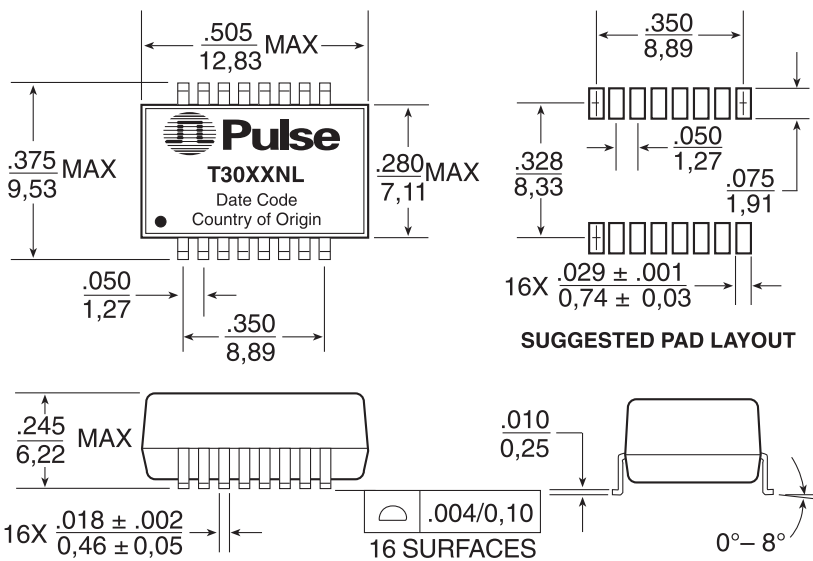
### Electrical Specifications @ 25°C — Operating Temperature - 40°C to +85°C

RoHS-6 Compliant Part Number	Turns Ratio (±2%)		OCL Primary @ 25°C (µH MIN)		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/2	1-2	7-8

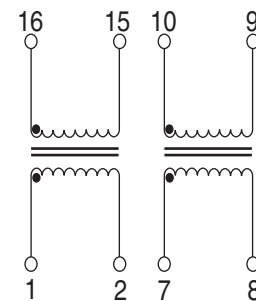
## Mechanical

## Schematics

### BH



1



2

Weight .....1.0 grams  
Tape & Reel ..... 600/reel  
Tube ..... .40/tube

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$   
Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$

USA 858 674 8100 • Germany 49 7032 7806 0 • Singapore 65 6287 8998 • Shanghai 86 21 32181071 • China 86 755 33966678 • Taiwan 886 3 4643715

# 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 75  $\Omega$  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. T3023NLT).
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 the Pulse web site Data Sheet Menu to find the latest Transformer Selection Guide.

### For More Information:

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