# ISDN S-Interface Low Profile Dual SMT Transformers



T613.E (04/12)





- RoHS peak reflow temperature rating 245°C
- Meets pulse waveform template of CCITT I.430 when recommended transformer and chip pair are used
- Excellent longitudinal balance
- 2 kVrms isolation voltage
- Available in Tape & Reel or tube packaging
- UL recognized

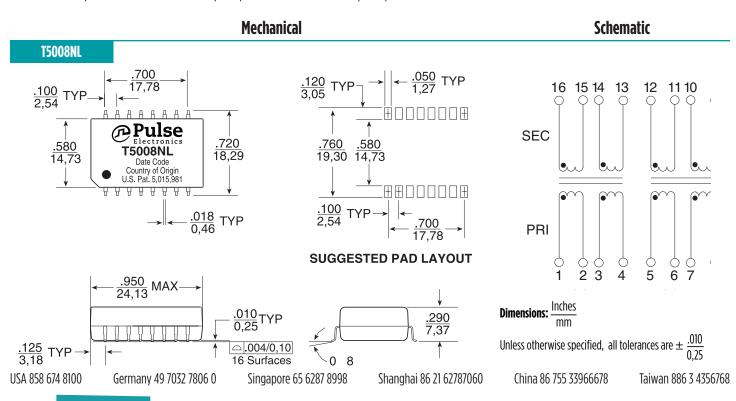
Electrical Specifications @ 25°C – Operating Temperature 0°C to 70°C													
RoHS	<b>Ratio</b> <sup>A</sup> (±2%)		OCL Pri L L Sec (µH MAX)			Pri <sup>B</sup> MAX)		<b>DCR Pri</b> (Ω ±25%)		<b>DCR Sec</b> (W ±25%)			
Complian Part Number	A	В	A & B	A	В	A & B	A	В	A	В	A	В	(mA MAX)
T5008NL	1:1	1:1	22	5	5	100	42	42	2.4	2.4	2.4	2.4	1750

U.S. Patent No. 5,015,981Z

#### Notes:

- **A.** A center-tapped winding can be created by connecting two ends of a split center winding together on the printed circuit board. In ISDN-S applications, the primary winding is the line side transforme winding.
- **B. Minimum primary** inductance and maximum distributed capacitance satisfy the transmitter output and receiver input impedance requiremens of CCITT I.430 for both the TE and the NT. The maximum distributed capacitance allows sufficient margin for the capacitance of the IC and a protection diode network. It is consistent with the overall maximum value specified and the permitted length of the basic access TE cord.
- **C. The maximum** specified unbalanced DC current capability is based on 20 mH minimum primary OCL.

pulseelectronics.com



## ISDN S-Interface Low Profile Dual SMT Transformers

IC Manufacturer	IC Part Number	Dual Surface Mount	
		TX & RX	
Motorola	MC145474/145475 MC145574	T5008NL	

Packaging Information				
Туре	SMT			
Part Weight	7 grams			
Parts/Tube	20			
Parts/Tray*	50			
Parts/Reel*	200			
Reel Diameter	13 inches			
Tape Width	44 mm			
Pitch	24 mm			

**Notes:** Standard packaging for the transformer is anti-static tubes. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the end of the part number, (i.e. T5008NLT).

### **Application Notes**

1. General Information - The S-interface is the standardized four-wire digital telephone access point defined by the CCITT I-series recommendations for the Integrated Services Digital Network. This "basic rate succes" accommodates two 64 kBps "B-channels" for more information, one 16Kbps "D-channel" intended for signaling and control, and 48Kbps for framing and other purposes, giving a total rate of 192Kbps. The CCITT physical layer recommends that the user network interface be transformer coupled.

The transformer provides isolation for the line card or the terminal from the line. It is also a way to provide phantom power feeding to the terminal over the S-loop. Each end requires a transmit and a receive transformer. Chokes are used in some applications to reduce common mode noise.

Transformers described in this data sheet are matched to the transceivers offered by the IC manufacturers listed.

- Safety Standards Recognition All transformers listed in this data sheet are recognized to UL 1459 and UL 1950 as a basic insulation barrier.
- **3. Flammability** Materials used in the products are recognized UL94-VO. Products meet the requiremens of IEC 695-2-2 (needle flame test).
- **4. For more** application notes please refer to data sheet T604.

#### Common Mode Chokes

Refer to data sheet G002 for selection of low and high frequency common mode chokes.

### For More Information

I OI WIOIC IIII	Officiali				
Pulse Worldwide Headquarters	Pulse Europe Einsteinstrasse 1	Pulse China Headquarters B402, Shenzhen Academy of	Pulse North China Room 2704/2705	Pulse South Asia 135 Joo Seng Road	<b>Pulse North Asia</b> 3F. No. 198
12220 World Trade Drive	D-71083 Herren-	Aerospace Technol-	Super Ocean Finance	#03-02	Zhongyuan Road
San Diego, CA	berg	ogy Bldg.	Ctr.	PM Industrial Bldg.	Zhongli City
92128	Germany	10th Keiinan Road	2067 Yan An Road	Singapore 368363	Taoyuan County 320
U.S.A.		High-Tech Zone	West		Taiwan R. O. C.
		Nanshan District	Shanghai 200336		Tel: 886 3 4356768
		Shenzen, PR China	China	Tel: 65 6287 8998	Fax: 886 3 4356823 (Pulse)
Tel: 858 674 8100	Tel: 49 7032 78060	518057		Fax: 65 6287 8998	Fax: 886 3 4356820 (FRE)
Fax: 858 674 8262	Fax: 49 7032 7806 135	Tel: 86 755 33966678	Tel: 86 21 62787060		, ,
		Fax: 86 755 33966700	Fax: 86 2162786973		

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, 2012. Pulse Electronics, Inc. All rights reserved.



pulseelectronics.com

T613.E (04/12)

## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Audio Transformers / Signal Transformers category:

Click to view products by Pulse manufacturer:

Other Similar products are found below:

CX2041NLT MGPWT-00449-P PE-64961 H1302FNLT H5008FNL H5012FNL H5020FNLT H5077NLT H5079NLT H5084FNLT

B78476A9558A003 1812WBT2-4 1879479-1 HX2260FNL HX5014FNL EX2024FNL FL1066 T1137NLT T3012NL PE-65812FNL PE65848FNLT H1174FNL H1302FNL H5015FNL H5019EFNL H5062FNLT CX2047LNL MGPWT-00059-P MGPWT-00266-P MGPWT00278-P MGPWT-00431-P TTC-100 TTC-143-H TTC-5032-1 BX1194WNLT HX1234NLT HX5008FNLT HX5019FNL HX5084NL 31879385-5 TX1263NLT 4-1879391-0 T1142NL HX6101FNL HX5084FNL HX1148NL HX5020FNLT HX5014FNLT T1124NL
1879732-1