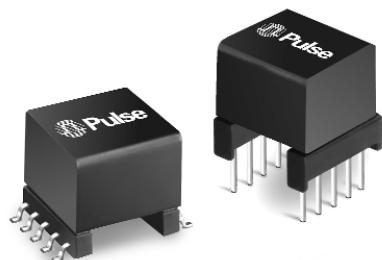


HDSL LINE TRANSFORMERS

For Conexant Chipsets



- Excellent THD performance
- Small footprint
- Designed to meet UL1950 supplementary insulation requirements for working voltage up to 250Vrms

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

Part Number	Mount.	Matched to Conexant's Chipset No.	Application	Turns Ratio Line - Chip (±2%)	Inductance - Line Side @ 10kHz, 100mV (1-5) with (2-4) shorted	Leakage Inductance - Line Side @ 100kHz (1-5) with (2-4) and (7-9) shorted	DC Resistance	
							Line Side (1-4) = (2-5)	Chip Side (7-9)
B1017	THT	BT8921/BT8970	784Kpbs	2CS:1	3.0mH ±6%	15μH MAX @ 0.02Vrms	≤ 1.25Ω	≤ 1.00Ω
B1018	THT	BT8921/BT8970	1168Kpbs	2CS:1CT	2.0mH ±10%	13μH MAX @ 0.10Vrms	≤ 1.25Ω	≤ 1.00Ω
B1028 ¹	SMT	BT8921/BT8970	1168Kpbs	2CS:1CT	2.0mH ±6%	11μH MAX @ 0.10Vrms	≤ 1.20Ω	≤ 1.00Ω
B1020A	THT	RS8973	272 to 2320Kpbs	2CS:1	2.0mH ±6%	6.5μH MAX @ 0.02Vrms	≤ 2.00Ω	≤ 1.10Ω
B1040A ¹	SMT	RS8973	272 to 2320Kpbs	2CS:1	2.0mH ±10%	6.5μH MAX @ 0.02Vrms	≤ 1.60Ω	≤ 1.05Ω
B1075	THT	RS8973	272 to 2320Kpbs	2CS:1CT	2.0mH ±6%	8μH MAX @ 0.02Vrms	≤ 2.00Ω	≤ 0.70Ω

Additional Electrical Specifications

Part Number	Longitudinal Balance (dB)	THD @ 135Ω (dB)	Insertion Loss @ 135Ω (dB)	Return Loss @ 135Ω (dB)	Isolation Voltage (Vrms @ 60 sec)
B1017	≤ -53 (40kHz to 200kHz)	≤ -70 (10kHz, 5.0Vrms)	≤ 0.40 (26kHz to 200kHz)	≥ 19 (40kHz to 200kHz)	1500
B1018	≤ -53 (30kHz to 300kHz)	≤ -70 (40kHz, 1.85Vrms)	≤ 0.50 (40kHz)	≥ 16 (40kHz to 300kHz)	1500
B1028	≤ -50 (40kHz to 300kHz)	≤ -70 (20kHz, 4.5Vrms)	(Data not available)	≥ 16.5 (40kHz to 300kHz)	1500
B1020A	≤ -50 (30kHz to 300kHz)	≤ -70 (10kHz, 5.0Vrms)	≤ 0.65 (30kHz to 580kHz)	≥ 16 (40kHz to 300kHz)	1500
B1040A	≤ -50 (30kHz to 420kHz)	≤ -70 (10kHz, 5.0Vrms)	≤ 0.60 (30kHz to 580kHz)	≥ 16 (40kHz to 300kHz)	1500
B1075	≤ -50 (30kHz to 300kHz)	≤ -70 (10kHz, 5.0Vrms)	≤ 0.50 (30kHz to 580kHz)	≥ 16 (40kHz to 300kHz)	1500

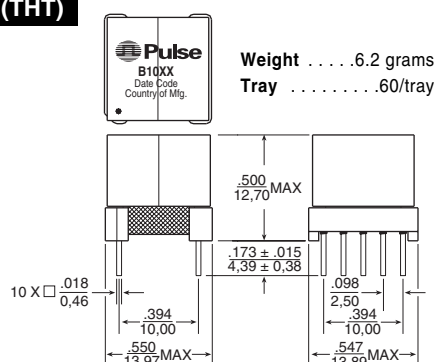
¹Transformers are shipped in trays unless Tape & Reel packaging is specified by adding the suffix "T" to the part number (i.e. B1028T)

²DCR on the chip side of part number B1075 is given for (7-8) = (8-9)

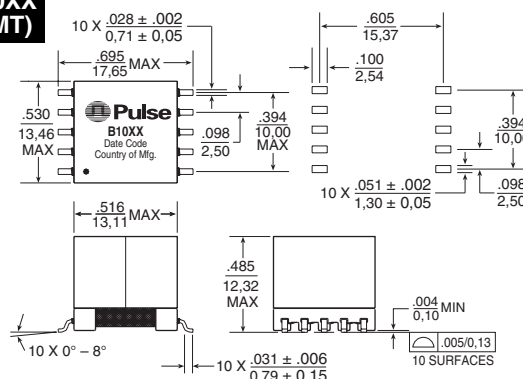
Mechanicals

Schematics

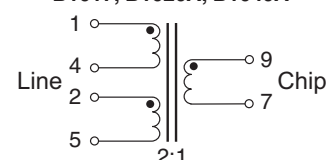
B10XX (THT)



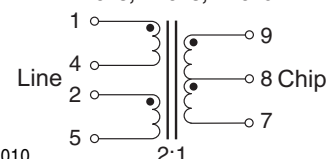
B10XX (SMT)



B1017, B1020A, B1040A



B1018, B1028, B1075



Dimensions: Inches
mm

Unless otherwise specified, all tolerances are ± .010
0.25

For More Information:

Pulse Worldwide Headquarters

12220 World Trade Drive
San Diego, CA 92128
U.S.A.
www.pulseeng.com
TEL: 858 674 8100
FAX: 858 674 8262

Pulse Northern Europe

3 Huxley Road
Surrey Research Park
Guildford, Surrey GU2 5RE
United Kingdom
TEL: 44 1483 401700
FAX: 44 1483 401701

Pulse Southern Europe

Zone Industrielle
F-39270
Orgelet
France
TEL: 33 3 84 35 04 04
FAX: 33 3 84 25 46 41

Pulse China Headquarters

No. 1
Industrial District
Changan, Dongguan
China
TEL: 86 769 5538070
FAX: 86 769 5538870

Pulse North China

Room 1002
No. 819
Nanjing West Rd
Shanghai
China
TEL: 86 21 32181071
FAX: 86 21 32181396

Pulse South Asia

150 Kampong Ampat
#07-01/02
KA Centre
Singapore 368324
TEL: 65 6287 8998
FAX: 65 6280 0080

Pulse North Asia

3F-4, No. 81, Sec. 1
Hsin Tai Wu Road
Hsi-Chih
Taipei Hsien
Taiwan
TEL: 886 2 26980228
FAX: 886 2 26980948

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, 2005. Pulse Engineering, Inc. All rights reserved.

www.pulseeng.com

B978.B (12/05)