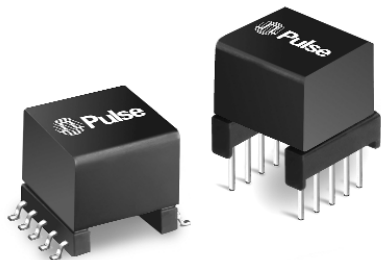





HDSL LINE TRANSFORMERS

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

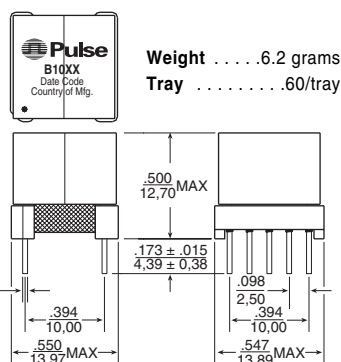
¹Transformers are shipped in trays unless Tape & Reel packaging is specified by adding the suffix "T" to the part number (i.e. B1028T)

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

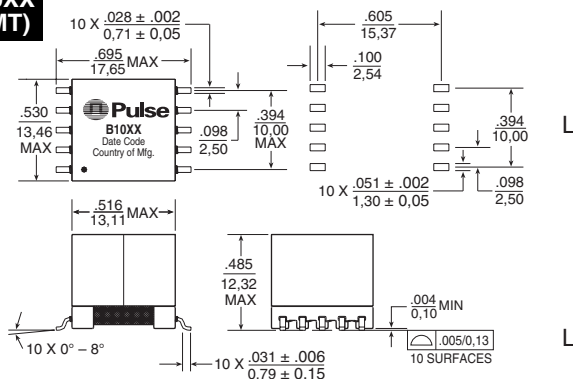
Mechanicals

Schematics

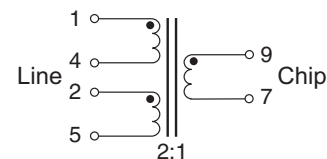
B10XX (THT)



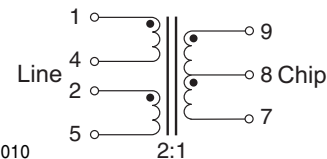
B10XX (SMT)



B1017, B1020A, B1040A



B1018, B1028, B1075



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

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

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B978.B (12/05)