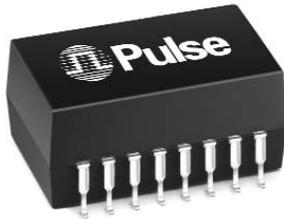


VDSL TRANSFORMER

For Use with Broadcom® BCM 6010/6020



- Hybrid transformer provides two-wire to four-wire conversion
- Extended bandwidth
- Surface mount device
- Meets international safety regulations for telecom

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

| Part Number | Turns Ratio | | DCR (MAX) | Return Loss (dB MIN) | Insertion Loss (dB MAX) | Transhybrid Loss (dB MIN) | Longitudinal Balance (dB TYP) | Isolation Voltage (Vrms) | | |
|-------------|-------------|------|-----------|------------------------|-------------------------|---------------------------|-------------------------------|--------------------------|----------------------|----------------------|
| | Trans. | Rec. | | | | | | | | |
| BX4030 | 2:1 | 1:1 | 0.5 Ω | 138 kHz to 300 kHz: 8 | 138 kHz to 30 MHz: .7 | 138 kHz to 20 MHz: 30 | 138 kHz to 300 kHz: 60 | 2500 | | |
| | | | | 300 kHz to 1 MHz: 13.5 | | | | | 20 MHz to 30 MHz: 25 | 300 kHz to 1 MHz: 50 |
| | | | | 1 MHz to 10 MHz: 20 | | | | | | 1 MHz to 10 MHz: 45 |
| | | | | 10 MHz to 20 MHz: 13.5 | | | | | | 10 MHz to 30 MHz: 40 |
| | | | | 20 MHz to 30 MHz: 8 | | | | | | |

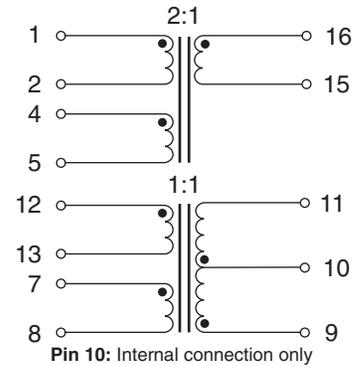
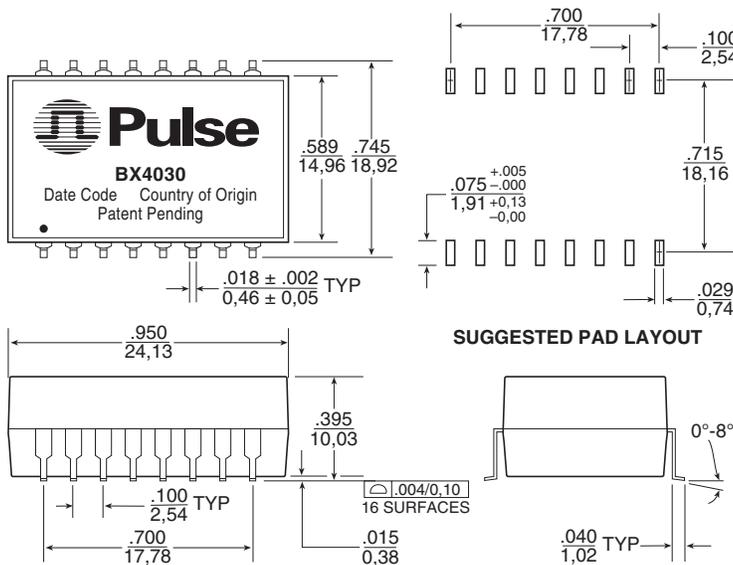
NOTES:

- BX4030 complies with the safety regulations of IEC950 for supplementary insulation.
- Surge Voltage Capability** - Metallic: 800 Vpeak, 10/560 μsec; Longitudinal: 2400 Vpeak, 10/700 μsec.
- Extended Temperature Range** - Insertion loss will increase approximately 0.5 db from 138 kHz to 1 Mhz. Return loss will decrease to 5 dB TYP @ 138 kHz and 10 dB TYP @ 300 kHz.
- Common mode chokes to reduce ingress from AM radio broadcast or HAM radio are available. See data sheet B912 for parts B4001 and B4003.

Mechanical

Schematics

BX4030



Weight.....8.1 grams
 Tube.....20/tube
 Tape & Reel100/reel

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

For More Information :

| UNITED STATES (Worldwide) | UNITED KINGDOM (Northern Europe) | FRANCE (Southern Europe) | SINGAPORE (Southern Asia) | TAIWAN, R.O.C. (Northern Asia) | HONG KONG (China/Hong Kong) | DISTRIBUTOR |
|---|--|---|---|---|---|-------------|
| 12220 World Trade Drive San Diego, CA 92128 U.S.A. http://www.pulseeng.com TEL: 858 674 8100 FAX: 858 674 8262 | 1 & 2 Huxley Road The Surrey Research Park Guildford, Surrey GU2 5RE United Kingdom TEL: 44 1483 401700 FAX: 44 1483 401701 | Zone Industrielle F-39270 Orgelet France TEL: 33 3 84 35 04 04 FAX: 33 3 84 25 46 41 | 150 Kampong Ampat #07-01/02 KA Centre Singapore 368324 TEL: 65 6287 8998 FAX: 65 6280 0080 | 3F-4, No. 81, Sec. 1 HsinTai Wu Road Hsi-Chih, Taipei Hsien Taiwan, R.O.C. Tel: 886 2 2698 0228 FAX: 886 2 2698 0948 | 9/F, Phase 2, Tai Sang Shatin Warehouse Centre 6 Wong Chuk Yeung Street Fotan, Shatin, Hong Kong TEL: 852 2788 6588 FAX: 852 2776 1055 | |

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 products and/or registered trademarks of their respective owners.

Printed on recycled paper. ©2003, Pulse Engineering, Inc.

B984.A (11/03)