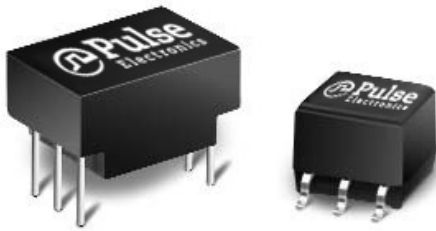


# VDSL Transformers

For Use with Broadcom® and Texas Instruments Chipset



- Ⓜ For use with Broadcom's BCM6315 transceiver chip
- Ⓜ B4020, B4021 and BX4055: for use with Texas Instrument's TNET800 chipset
- Ⓜ Excellent return loss and balance
- Ⓜ Surface mount or through hole package

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

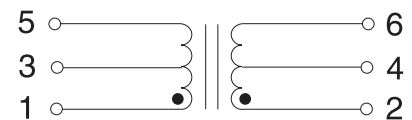
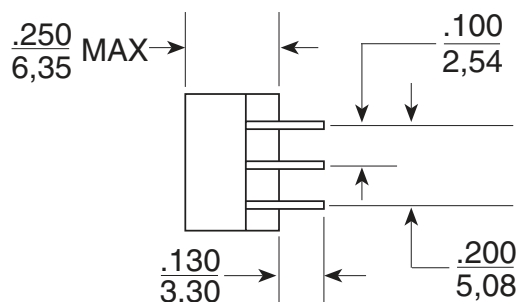
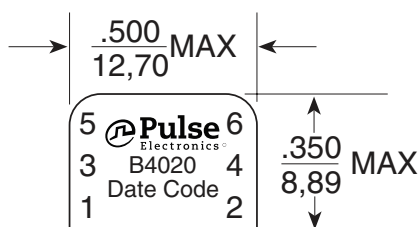
Part Number	Turns Ratio	Inductance (μH MIN)	Return Loss (dBMIN)	Insertion Loss* (dBMAX)	Line Impedance (Ω)	Longitudinal Balance (dB TYP)	CM Rejection (dB TYP)	Isolation Voltage (Vrms)
B4020 (THT)	1CT:1CT	190	300 kHz to 1 MHz: 18	200 kHz to 1 kHz: 0.8	100	200 kHz: 60	10 MHz: 35	3000
			1 kHz to 11 MHz: 20			11 MHz: 42	30 MHz: 33	
			11 kHz to 30 MHz: 16	1 kHz to 30 kHz: 0.7		100 MHz: 30	100 MHz: 25	
BX4055 (SMT)	1:1	190	300 kHz to 20 MHz: 20	200 kHz to 400 kHz: 0.75	100	200 kHz: 60	10 MHz: 35	1500
B4021 (SMT)	1CT:1CT		20 kHz to 30 MHz: 18	400 kHz to 30 MHz: 0.50		11 MHz: 50	30 MHz: 33	
BX4056 (SMT)	1:1.16	190	300 kHz to 1 MHz: 15	200 kHz to 400 kHz: 0.75	100	200 kHz: 60	10 MHz: 35	1500
			1 kHz to 20 MHz: 20			400 kHz to 30 MHz: 0.60	11 MHz: 50	
			20 kHz to 30 MHz: 17	100MHz: 40		100 MHz: 30		

**Notes: Surge Voltage Capability:** Metallic: 800 Vpeak 10/560 sec. Long: 2400 Vpeak 10/700 sec. **B4020** is designed to meet the requirements for supplementary isolation according to IEC950. Common Mode Chokes to reduce common mode ingress from AM Broadcast or HAM radios are available. See data sheet **B912** for parts **B4001** and **B4003**.

## Mechanical

## Schematic

### B4020



Weight .....1.2grams

Tube .....60/tube

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$

Notes: Leads are 24 AWG solderable.  
Unused pins not provided.

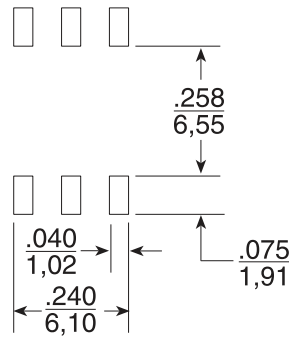
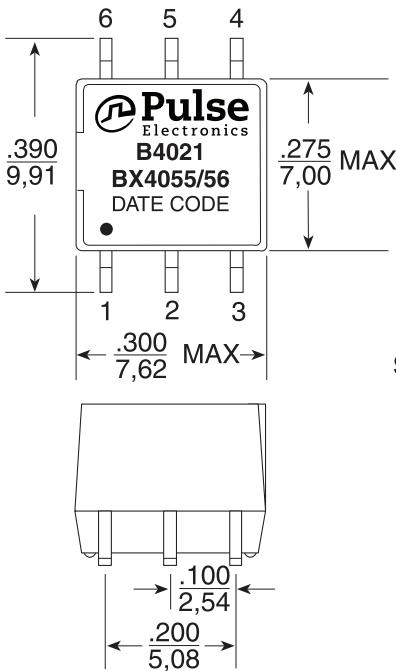
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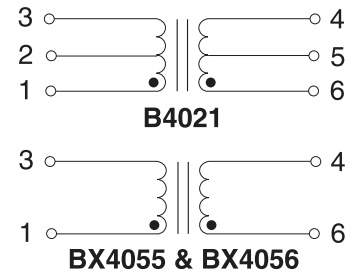
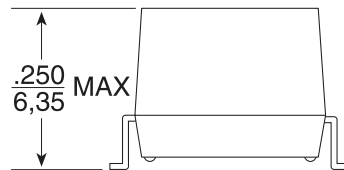
## Mechanical (continued)

## Schematic

B4021 / BX4055 / BX4056



### SUGGESTED PAD LAYOUT



Weight .....0.6 grams  
Tape & Reel .....70/reel

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified,  
all tolerances are  $\pm \frac{.010}{0,25}$

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