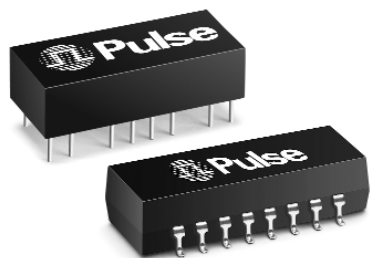


# VDSL TRANSFORMERS

## For Use with Broadcom® BCM 6010/6020



- Supports speeds up to 25.92 Mbps
- Provides two-wire to four-wire conversion
- Surface mount or through hole package

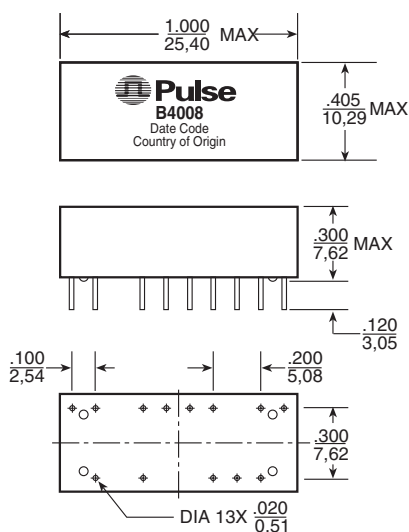
### Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

Part Number	Turns Ratio		DCR (MAX)	Return Loss (dB MIN)	Insertion Loss* (dB MAX)	Transhybrid Loss (dB MIN)	Longitudinal Balance (dB MIN)	Isolation Voltage (Vrms)
	Trans.	Rec.						
B4008 (THT)	2:1	1:1	0.5 Ω	138 kHz to 1 MHz: 13.5	138 kHz to 20 MHz: 0.5	138 kHz to 1 MHz: 30	138 kHz to 300 kHz: 60	2000
B4025 (SMT)				1 MHz to 20 MHz: 20		1 MHz to 20 MHz: 25	300 kHz to 1 MHz: 50	
						1 MHz to 20 MHz: 30		

**NOTE:** 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.  
**Surge Voltage Capability:** Metallic: 800 Vpeak 10/560 µsec. Long.: 2400 Vpeak 10/700 µsec.  
**Surge over the Extended Temperature Range:** Insertion Loss can increase to 1 dB. Return Loss can drop to 7 dB from 138 kHz to 300 kHz, and 12 dB from 300 kHz to 1 MHz.

## Mechanicals

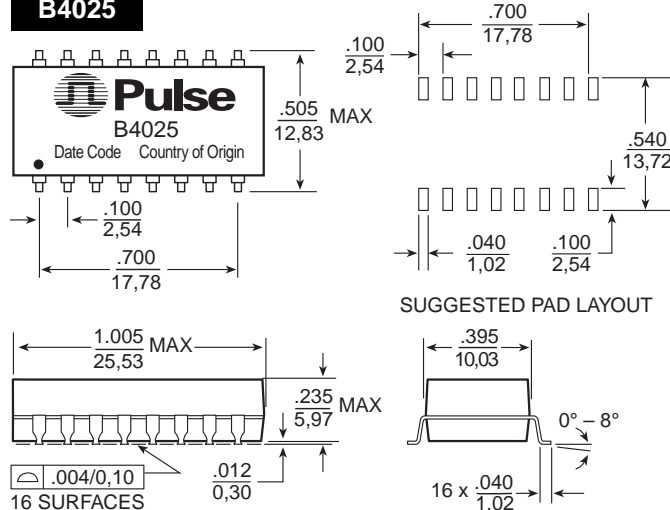
### B4008



Weight.....2.8 grams  
 Tube......20/tube

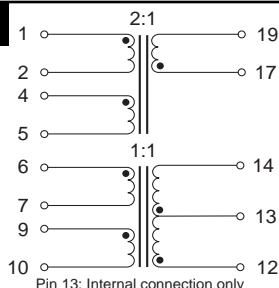
**Dimensions:**  $\frac{\text{Inches}}{\text{mm}}$   
 Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$

### B4025

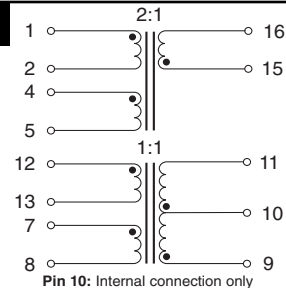


## Schematics

### B4008



### B4025



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**B925.A (11/03)**