

HOME PHONE NETWORKING BANDPASS FILTER



- For use with Broadcom's® iLine 10™ Chipset (BCM4100 and BCM4210)
- Includes isolation and EMI filtering
- Designed to withstand 235°C peak infrared reflow temperature
- B6019 is designed with a 2 kV, 1000 pf capacitor

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

Part Number	Insertion Loss @ 4.75 to 9.25 MHz		Attenuation (MIN)			Return Loss @ 4.75 to 9.25 MHz (MIN)	Common to Differential Mode Rejection @ 200 kHz to 22 MHz	Isolation Voltage ¹ (Vrms)
	(MIN)	(MAX)	1.1 MHz	22 MHz	54 MHz			
B6019	1.0 dB	2.0 dB	60 dB	35 dB	50 dB	12 dB	40 dB	1500
B6020								
BX6031								

NOTE: Input Impedance data is provided on the back of this page.

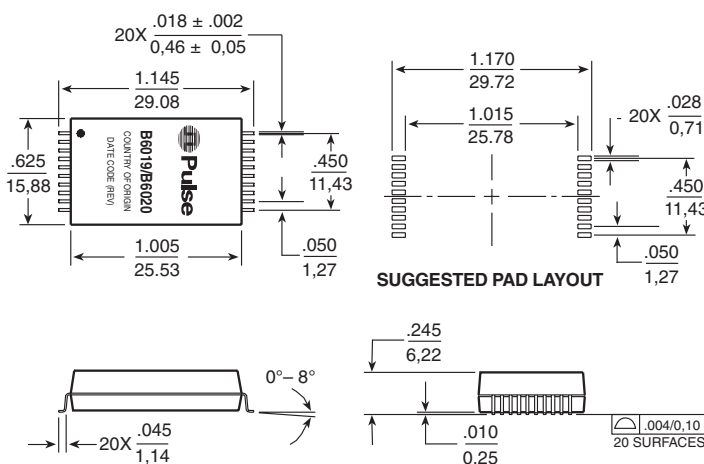
Test Conditions

Part Number	Insertion Loss		Attenuation		Return Loss		Common to Differential Mode Rejection		Isolation Voltage ¹
	Input	Output	Input	Output	Input	Output	Input	Output	
B6019	(1-3)	(20-18)	(1-3)	(20-18)	(20-18)	(1-3)	(1-3)	(20-18)	(1-3-5-7) shorted to (18-20) shorted
B6020									
BX6031	(1-2)	(8-9)	(1-2)	(8-9)	(8-9)	(1-2)	(1-2)	(8-9)	(1-2-15-16) shorted to (8-9-10) shorted

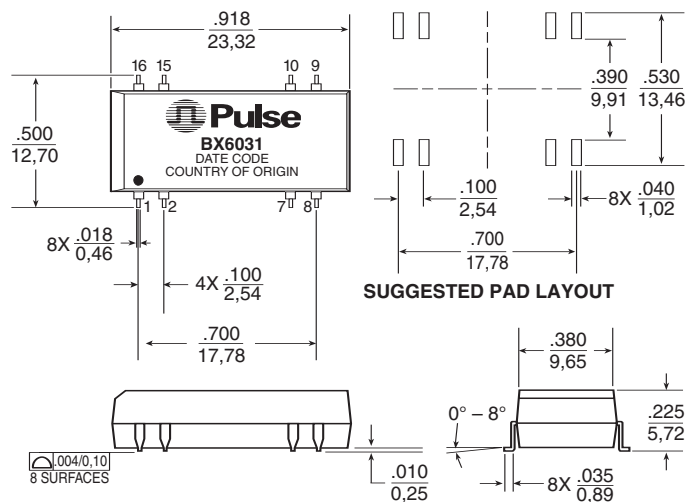
NOTES: Filters are shipped in trays, unless Tape & Reel packaging is specified. Please add the suffix "T" (ex: B6019T) for Tape & Reel orders.
¹Compliance with FCC Part 68 metallic and longitudinal voltage surge is provided by an external Teccor P3100SB sidactor across tip and ring.

Mechanicals

B6019/B6020



BX6031



	B6019/B6020	BX6031
Weight	4.5 grams	2.5 grams
Tape & Reel	250/reel	250/reel
Tube	30/tray	20/tray

Dimensions: Inches
mm

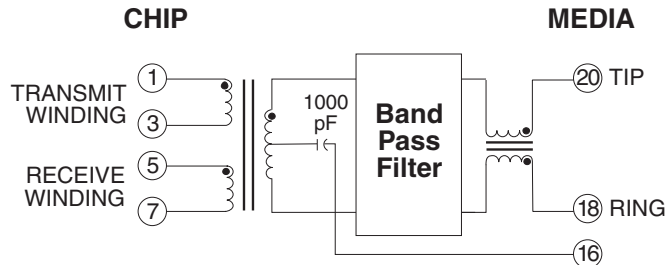
Unless otherwise specified, all tolerances are ± .010 / 0.25

HOME PHONE NETWORKING BANDPASS FILTER

Schematics

B6019

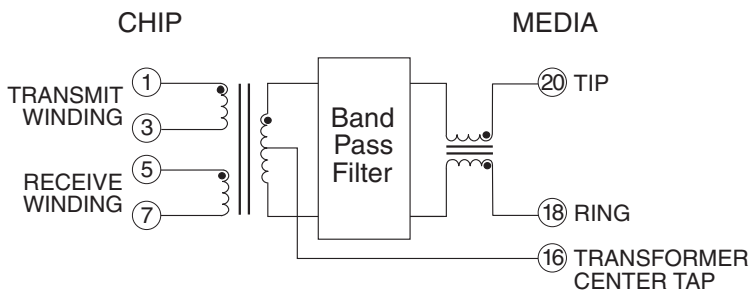
URNS RATIO: (20-18):(1-3)=1:0.667
(20-18):(5-7)=1:2



NOTE: Input impedance is measured across pins 18 to 20 with a 44.2 Ω load across pins 1 and 3.

B6020

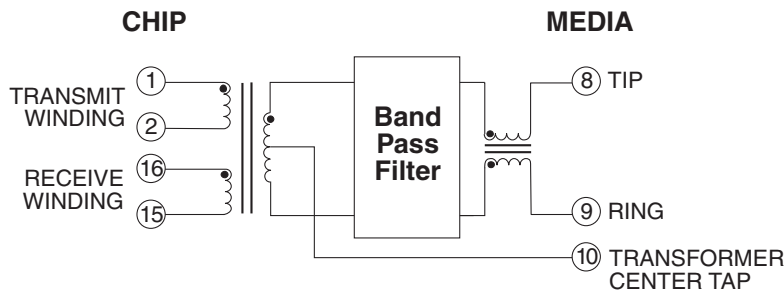
URNS RATIO: (20-18):(1-3)=1:0.667
(20-18):(5-7)=1:2



NOTE: Input impedance is measured across pins 18 to 20 with a 44.2 Ω load across pins 1 and 3.

BX6031

URNS RATIO: (8-9):(1-2)=1:0.667
(8-9):(16-15)=1:2



NOTE: Input impedance is measured across pins 9 to 8 with a 44.2 Ω load across pins 1 and 2.

Input Impedance

Frequency Range (kHz)	Minimum Impedance (Ω)
0 < f <= 0.285	1 M
0.285 < f <= 2.85	100 K
2.85 < f <= 28.5	10 K
28.5 < f <= 95	4.0 K
95 < f <= 190	2.0 K
190 < f <= 285	1.4 K
285 < f <= 380	1.0 K
380 < f <= 475	850
475 < f <= 570	700
570 < f <= 665	600
665 < f <= 760	525
760 < f <= 855	450
855 < f <= 950	400
950 < f <= 1000	350
1000 < f <= 1400	175
1400 < f <= 2300	100
2300 < f <= 2850	50
2850 < f <= 3085	25
3085 < f <= 4750	10
9250 < f <= 13125	10
13125 < f <= 14175	25
14175 < f <= 16800	50
16800 < f <= 21000	100
21000 < f <= 30000	50

For More Information :

UNITED STATES (Worldwide)

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

UNITED KINGDOM (Northern Europe)

1 & 2 Huxley Road
The Surrey Research Park
Guildford, Surrey GU2 5RE
United Kingdom
TEL: 44 1483 401700
FAX: 44 1483 401701

FRANCE (Southern Europe)

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

SINGAPORE (Southern Asia)

150 Kampong Ampat
#07-01/02
KA Centre
Singapore 368324
TEL: 65 287 8998
FAX: 65 280 0080

TAIWAN, R.O.C. (Northern Asia)

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

HONG KONG (China/Hong Kong)

19/F, China United Plaza
1008 Tai Nan West Street
Cheung Sha Wan, Kowloon
Hong Kong, China
TEL: 852 2788 6588
FAX: 852 2776 1055

DISTRIBUTOR

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.