

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.

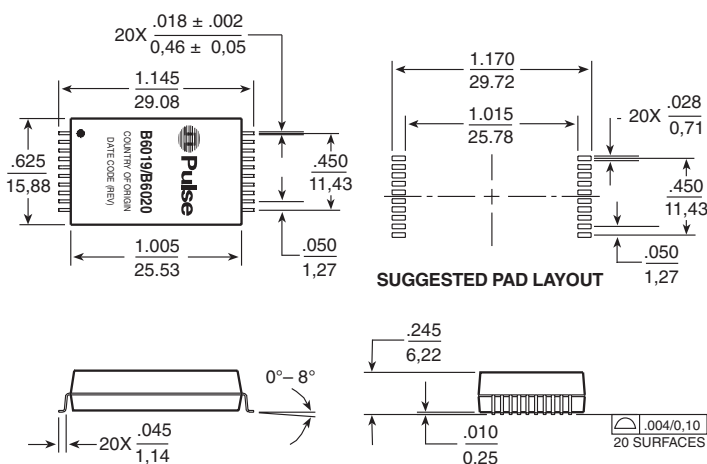
Test Conditions

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.

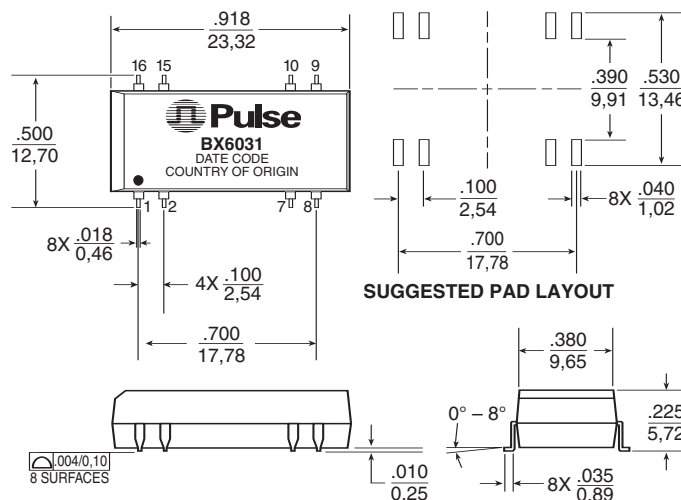
Mechanicals

B6019/B6020



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

BX6031



Dimensions: Inches
mm
Unless otherwise specified, all tolerances are ± .010
0,25

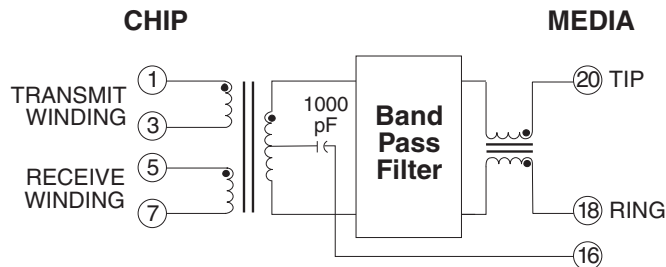
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Schematics

B6019

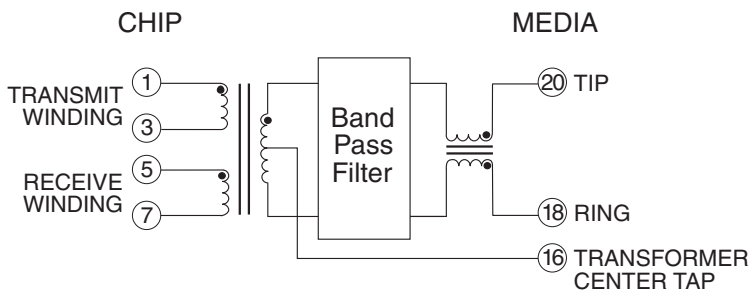
URNS RATIO: (20-18):(1-3)=1:0.667
(20-18):(5-7)=1:2



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

B6020

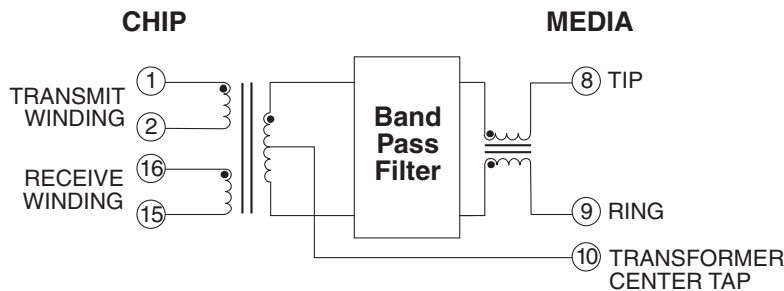
URNS RATIO: (20-18):(1-3)=1:0.667
(20-18):(5-7)=1:2



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

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