

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
-  B6013 is designed with a 2 kV, 1000 pf capacitor

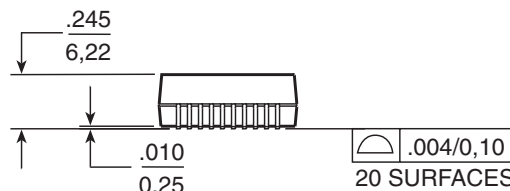
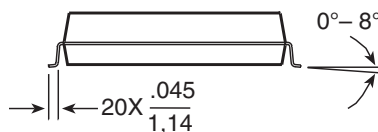
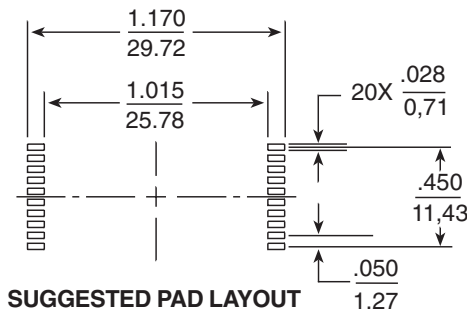
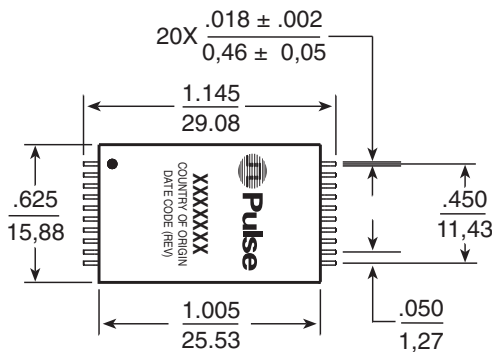
Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

PARAMETER	TEST CONDITION	UNITS	
		MIN	MAX
HomePNA™ V2.0 Insertion Loss (4.25 MHz to 9.75 MHz)	Input (1-3), Output (20-18)	1.0 dB	2.0 dB
HomePNA™ V2.0 Attenuation 1.1 MHz 22 MHz 54 MHz	Input (1-3), Output (20-18)	60 dB 35 dB 50 dB	
HomePNA™ V2.0 Return Loss (6.0 MHz to 9.0 MHz)	Input (20-18), Output (1-3)	12 dB	
HomePNA™ V2.0 Common to Differential Mode Rejection (200 kHz to 22 MHz)	Input (1-3), Output (20-18)	40 dB	
Isolation	Pins (1-3-5-7) shorted to (18-20) shorted	1500 Vrms ¹	
Input Impedance	(see table on page 2)		

NOTE: Filters are shipped in tubes unless Tape & Reel is specified. Please add the suffix "R" (for SF5770TR Tape & Reel orders) and the suffix "T" (for B6013T Tape & Reel orders). ¹Compliance with FCC Part 68 metallic and longitudinal voltage surge is provided by an external Teccor P3100SC sidactor across tip and ring.

Mechanical

SF5770T/B6013



Weight 4.5 grams
Tape & Reel250/reel
Tube30/tube
Dimensions: Inches
mm
Unless otherwise specified,
all tolerances are ± .010
0,25

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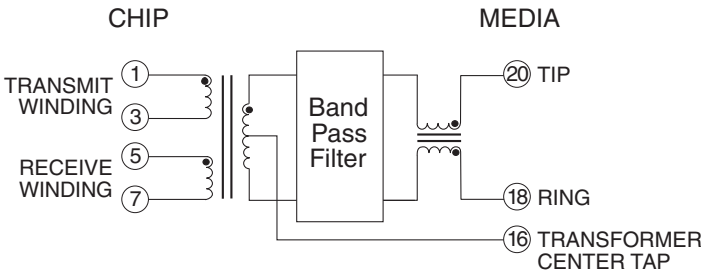


Schematics

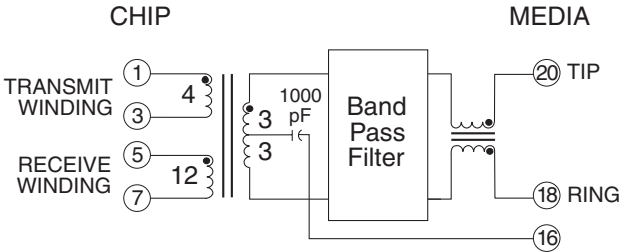
SF5770T

B6013

Turns Ratio: $(20-18):(1-3)=1:0.667$
 $(20-18):(5-7)=1:2$



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 $(20-18):(5-7)=1:2$



NOTE: Input impedance is measured across pins 18 to 20 with a 44.2 Ω load across pins 1 and 3. The magnitude of the input impedance shall be >10 Ω from 0-30 MHz and shall conform to the following lower-bound mask:

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

Frequency Range (kHz)	Minimum Impedance (Ω)
$1000 < f \leq 1400$	175
$1400 < f \leq 2300$	100
$2300 < f \leq 2850$	50
$2850 < f \leq 3085$	25
$3085 < f \leq 3725$	10
$3725 < f \leq 3935$	25
$3935 < f \leq 4000$	50
$10000 < f \leq 10450$	40
$10450 < f \leq 10925$	25
$10925 < f \leq 13125$	10
$13125 < f \leq 14175$	25
$14175 < f \leq 16800$	50
$16800 < f \leq 21000$	100
$21000 < f \leq 30000$	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

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