

Home Phone Networking Magnetic Module

EPB5119S



- Designed to work with Broadcom's BCM4210
- Integrated with 10/100 Base-T Magnetics
- Robust Construction allows for IR Processes
 - 1500 Vrms Isolation
- Temperature Range : -40°C to +85°C

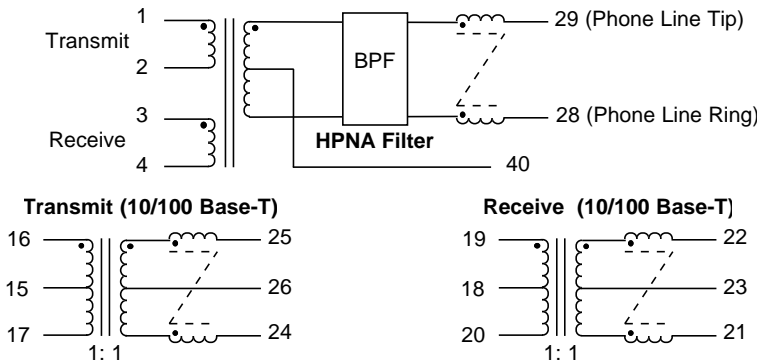
Electrical Parameters @ 25° C

HPNA	Cut-Off Freq. (MHz Typ.)		Insertion Loss (dB)	Return Loss (dB Min.)	Attenuation (dB Min.)			CMRR (dB Min.)		CMDR (dB Min.)	Turns Ratio	
	Lower Band	Upper Band			@ 1.1 MHz	@ 22 MHz	@ 54 MHz	@ 1 MHz	@ 100 MHz		Pins 29-28:1-3	Pins 29-28:3-4
		3.5	11.5	4.25 MHz - 9.75 MHz	6 MHz - 9 MHz	-60	-35	-50	-50	-50	-40	1:667

10/100 Base-T	Insertion Loss (dB Max.)		Return Loss (dB Min.)			CMRR (dB Min.)		
	1-80 MHz	@ 100 MHz	1-30 MHz	@ 60 MHz	@ 80 MHz	1-30 MHz	@ 100 MHz	@ 200 MHz
	Transmit	-1.0	-1.5	-18	-12	-10	-45	-35
Receive	-1.0	-1.5	-18	-12	-10	-45	-35	-10

• Cable Side Impedance : 100 Ω • Crosstalk : -35 dB Min. •

Schematic



HPNA Filter Input Impedance

With 44.2 Ω load across pins 1 and 2, please refer to the table below. The magnitude of the input impedance shall be > 10 Ω from 0-30 MHz and shall conform to the following lower-bound mask:

Frequency Range (KHz)	Minimum Impedance Ω	Frequency Range (KHz)	Minimum Impedance Ω
0 < f <= 0.285	1 M	1000 < f <= 1400	175
0.285 < f <= 2.85	100 K	1400 < f <= 2300	100
2.85 < f <= 28.5	10 K	2300 < f <= 2850	50
28.5 < f <= 95	4.0 K	2850 < f <= 3085	25
95 < f <= 190	2.0 K	3085 < f <= 3725	10
190 < f <= 285	1.4 K	3725 < f <= 3935	25
285 < f <= 380	1.0 K	3935 < f <= 4000	50
380 < f <= 475	850	10000 < f <= 10450	40
475 < f <= 570	700	10450 < f <= 10925	25
570 < f <= 665	600	10925 < f <= 13125	10
665 < f <= 760	525	13125 < f <= 14175	25
760 < f <= 855	450	14175 < f <= 16800	50
855 < f <= 950	400	16800 < f <= 21000	100
950 < f <= 1000	350	21000 < f <= 30000	50

Dimensions

Dim.	(Inches)			(Millimeters)		
	Min.	Max.	Nom.	Min.	Max.	Nom.
A	1.110	1.130	1.120	28.19	28.70	28.45
B	.470	.490	.480	11.94	12.45	12.19
C	.250	.270	.260	6.35	6.86	6.60
D	---	---	.950	---	---	24.13
E	.010	.015	.012	.254	.381	.305
F	---	---	.050	---	---	1.27
G	.590	.610	.600	14.99	15.49	15.24
H	.016	.022	.019	.406	.559	.483
I	.008	.012	.010	.203	.305	.254
J	---	---	.085	---	---	2.16
K	0°	8°	---	0°	8°	---
L	.025	.045	.035	.635	1.14	.889
M	---	---	.030	---	---	.762
N	---	---	.050	---	---	1.27
P	---	---	.090	---	---	2.29
Q	---	---	.670	---	---	17.02

Package

