Home Phone Networking
Analog Magnetics Module

EPB5147NC

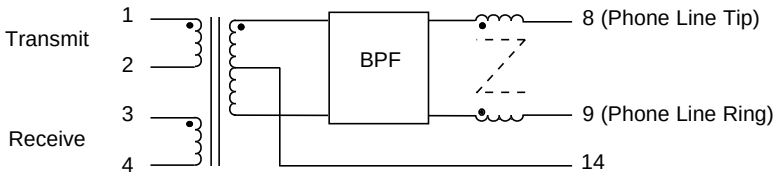
- Designed to work with Broadcom's BCM 4210
- UL approved file # E210972
- Robust construction allows for IR/VP processes
- 1500 Vrms Isolation
- Enhanced Common Mode Attenuation to pass FCC Class B
- Temperature Range -40°C to +85°C

Electrical Parameters @ 25° C

Cut-off Frequency		Insertion Loss (dB Max.)		Return Loss (dB Min.)	Attenuation (dB Min.)			Common to Differential (dB Min.)	Turns Ratio	
Lower Band	Upper Band	4.25 MHz - 9.75 MHz		6 MHz - 9MHz	@ 1.1 MHz	@ 22 MHz	@ 54 MHz	200 KHz - 22 MHz	Pins 20-18:1-3	Pins 20-18:5-7
3.5	11.5	-1.0 Min.	-2.2 Max.	-12	-60	-35	-50	-40	1:.667	1:2

- **Filter Characteristic Impedance** : 100 Ω

Schematic

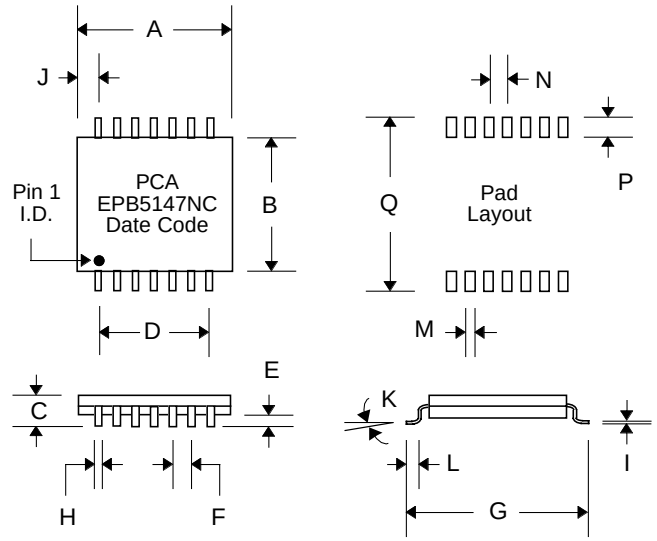


Input Impedance

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

Package



Dimensions

Dim.	(Inches) Min.	Max.	Nom.	(Millimeters) Min.	Max.	Nom.
A	.830	.850	.840	21.08	21.59	21.33
B	.740	.760	.750	18.79	19.30	19.05
C	.084	.092	.088	2.13	2.34	2.24
D	---	---	.600	---	---	15.24
E	.003	.010	.005	.076	.254	.127
F	---	---	.100	---	---	2.54
G	.870	.890	.880	22.10	22.61	22.35
H	.017	.022	.020	.432	.559	.508
I	.008	.013	.011	.203	.330	.279
J	---	---	.120	---	---	3.05
K	0°	8°	---	0°	8°	---
L	.025	.045	.035	.635	1.14	.889
M	---	---	.030	---	---	.762
N	---	---	.100	---	---	2.54
P	---	---	.085	---	---	2.16
Q	---	---	.910	---	---	23.11

PCA ELECTRONICS, INC.
16799 SCHOENBORN ST.
NORTH HILLS, CA 91343

TEL: (818) 892-0761
FAX: (818) 894-5791
http://www.pca.com