

Home Phone Networking Analog Magnetics Module

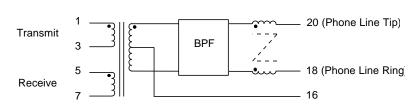
EPB5047NC

- Designed to work with Broadcom's BCM 4210
- Robust construction allows for IR/VP processes
 - 1500 Vrms Isolation
- Improved 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) | | 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 $\,\Omega\,$ •

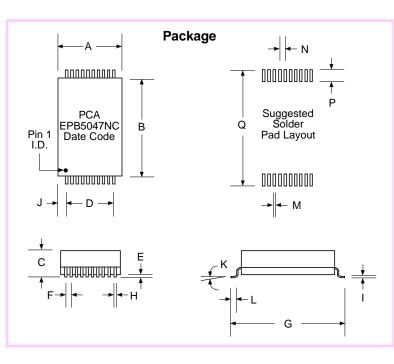


Schematic

Input Impedance

With 44.2 Ω load across pins 1 and 3, 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) | $\begin{array}{c} \text{Minimum} \\ \text{Impedance} \\ \Omega \end{array}$ | Frequency Range (KHz) | Minimum Impedance Ω |
|-----------------------------|-----------------------------------------------------------------------------|-----------------------------|---------------------------|
| 0 < f < = 0.28 | 51M | 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 | |
| 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 |



| Dime | nsions |
|------|--------|
| | |

| | | (Inches) |) | (Millimeters) | | | |
|------|-------|----------|-------|---------------|-------|-------|--|
| Dim. | Min. | Max. | Nom. | Min. | Max. | Nom. | |
| А | .600 | .620 | .610 | 15.24 | 15.75 | 15.49 | |
| В | .900 | 1.00 | .995 | 25.15 | 25.40 | 25.27 | |
| С | .225 | .245 | .235 | 5.72 | 6.22 | 5.97 | |
| D | | | .450 | | | 11.43 | |
| E | .010 | .015 | .013 | .254 | .381 | .330 | |
| F | | | .050 | | | 1.27 | |
| G | 1.140 | 1.160 | 1.150 | 28.96 | 29.46 | 29.21 | |
| Н | .016 | .022 | .019 | .406 | .559 | .483 | |
| 1 | .008 | .012 | .010 | .203 | .305 | .254 | |
| J | | | .080 | | | 2.03 | |
| 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 | | | 1.18 | | | 29.97 | |

http://www.pca.com

Product performance is limited to specified parameters. Data is subject to change without prior notice.

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