Home Phone Networking
Magnetic Module
EPB5047S


- Optimized for Broadcom's BCM 4210 •
- UL/IEC 950 Approved File \#132261 •
- Robust construction allows for IR/VP processes •
- 1500 Vrms Isolation •
- Enhanced Common Mode Attenuation to pass FCC Class B •
- Temperature Range $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ -

Electrical Parameters @ $\mathbf{2 5}{ }^{\circ} \mathrm{C}$

|  |  |  |  | Return Loss (dB Min.) | Attenuation (dB Min.) |  |  | Common to Differential (dB Min.) | Turns Ratio |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lower Band | Upper Band | 4.25 MHz | 9.75 MHz | $6 \mathrm{MHz}-9 \mathrm{MHz}$ | @ 1.1 MHz | @ 22 MHz | @ 54 MHz | $200 \mathrm{KHz}-22 \mathrm{MHz}$ | $\begin{gathered} \hline \text { Pins } \\ 20-18: 1-3 \end{gathered}$ | $\begin{gathered} \text { Pins } \\ 20-18: 5-7 \end{gathered}$ |
| 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 $44.2 \Omega$ load across pins 1 and 3 , please refer to the table below. The magnitude of the input impedance shall be $>10 \Omega$ from $0-30 \mathrm{MHz}$ and shall conform to the following lower-bound mask:


Dimensions

|  | (Inches) <br> Dim. |  |  | Min. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Max. | Nom. | Min. | Max. | Nom. |  |  |
| A | .600 | .620 | .610 | 15.24 | 15.75 | 15.49 |
| B | .970 | .990 | .980 | 24.64 | 25.15 | 24.89 |
| C | .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 |
| H | .016 | .022 | .019 | .406 | .559 | .483 |
| I | .008 | .012 | .010 | .203 | .305 | .254 |
| J | --- | --- | .080 | --- | --- | 2.03 |
| K | 0 | 8 | --- | $0^{\circ}$ | 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 |

