



## FPS Series

## 0.1 – 13.0GHz Divide-By-12 Prescaler

### Features

- Input Frequency: 0.1-13.0GHz
- Output Frequency: 0.008-1.08GHz
- Divide Ratio: 12
- Output Power: -1dBm
- Phase Noise: -145dBc/Hz
- DC Power: 12V
- SMA Connector

### Description

FPS-12-13 is a wideband frequency 0.1 – 13.0GHz divider with divide ratio of 12.

### Electrical Specifications @ +25 °C, Z<sub>S</sub> = Z<sub>L</sub> = 50 Ohms

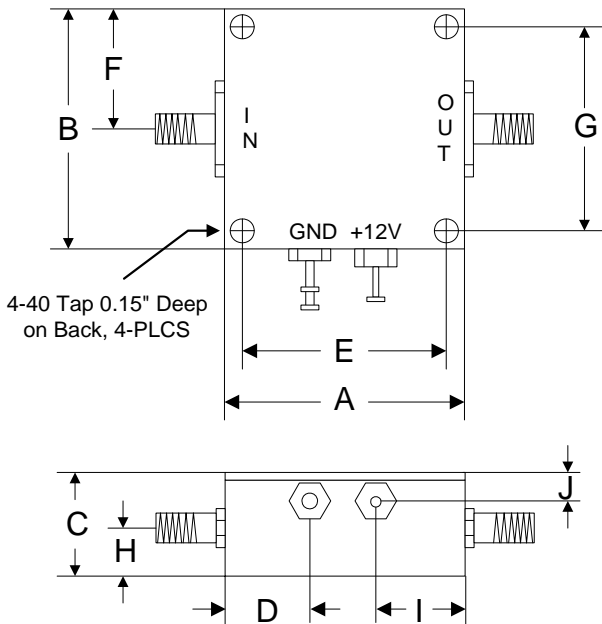
| Parameter                       | Unit   | Minimum | Typical | Maximum |
|---------------------------------|--------|---------|---------|---------|
| Input Frequency Range           | GHz    | 0.1     |         | 13.0    |
| Output Frequency Range          | GHz    | 0.008   |         | 1.08    |
| Fixed Divide Ratio              |        |         | 12      |         |
| Input Power Range               |        |         |         |         |
| f = 0.1GHz – 1.0GHz             | dBm    | -1      | -6      | +10     |
| f = 1.0GHz – 10.0GHz            | dBm    | -15     | -20     | +10     |
| f = 10.0GHz – 12.0GHz           | dBm    | -10     | -15     | +3      |
| f = 12.0GHz – 12.5GHz           | dBm    | -5      | -8      | +3      |
| Output Power                    | dBm    | -4      | -1      |         |
| SSB Phase Noise (100KHz Offset) | dBc/Hz |         | -145    |         |
| DC Power Supply                 | V      | 7       | 12      | 15      |
| Supply Current                  | mA     |         | 185     |         |



### Absolute Maximum Ratings

| Parameter             | Absolute Maximum  |
|-----------------------|-------------------|
| RF Input Power        | +13dBm            |
| Supply Voltage        | +16V              |
| Operating Temperature | -40 °C to +85 °C  |
| Storage Temperature   | -55 °C to +100 °C |

### Outline



|             | A     | B     | C     | D     | E     | F     | G     | H     | I     | J     |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>Inch</b> | 1.250 | 1.250 | 0.563 | 0.450 | 1.000 | 0.625 | 1.000 | 0.250 | 0.500 | 0.187 |
| <b>mm</b>   | 31.75 | 31.75 | 14.29 | 11.43 | 25.40 | 15.88 | 25.40 | 6.35  | 12.70 | 4.76  |