

FPS Series

0.1 – 12.5GHz Divide-By-10 Prescaler

Features

- Input Frequency: 0.1-12.5GHz
- Output Frequency: 0.01-1.25GHz
- Divide Ratio: 10
- Output Power: -1dBm
- Phase Noise: -144dBc/Hz
- DC Power: 12V
- SMA Connector

Description

FPS-10-12 is a wideband frequency 0.1 – 12.5GHz divider with divide ratio of 10.

Picture



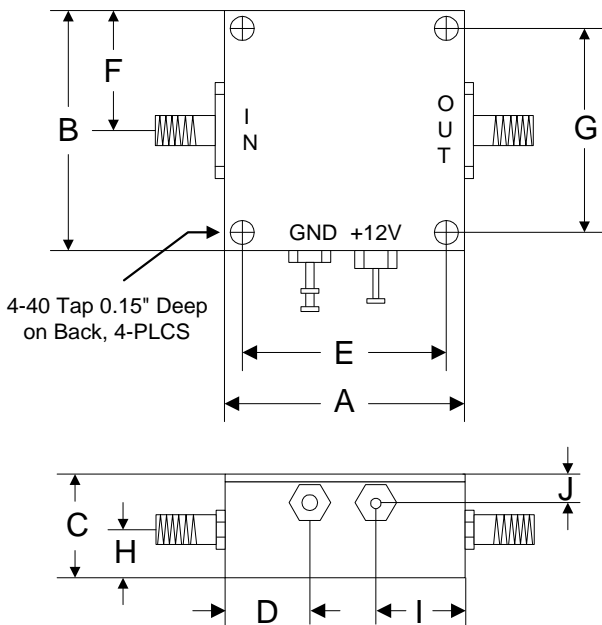
Electrical Specifications @ +25 °C, $Z_S = Z_L = 50$ Ohms

| Parameter | Unit | Minimum | Typical | Maximum |
|---------------------------------|--------|---------|---------|---------|
| Input Frequency Range | GHz | 0.1 | | 12.5 |
| Output Frequency Range | GHz | 0.01 | | 1.25 |
| Fixed Divide Ratio | | | 10 | |
| Input Power Range | | | | |
| f = 0.1GHz – 1.0GHz | dBm | -6 | 0 | +10 |
| f = 1.0GHz – 10.0GHz | dBm | -15 | -20 | +10 |
| f = 10.0GHz – 12.0GHz | dBm | -10 | -15 | +5 |
| f = 12.0GHz – 12.5GHz | dBm | -4 | -8 | +2 |
| Output Power | dBm | -4 | -1 | |
| SSB Phase Noise (100KHz Offset) | dBc/Hz | | -144 | |
| 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 |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Inch | 1.250 | 1.250 | 0.563 | 0.450 | 1.000 | 0.625 | 1.000 | 0.250 | 0.500 | 0.187 |
| mm | 31.75 | 31.75 | 14.29 | 11.43 | 25.40 | 15.88 | 25.40 | 6.35 | 12.70 | 4.76 |