

FPS Series

0.8 – 8.0GHz Divide-By-520 Prescaler

Features

- Input Frequency: 0.8-8.0GHz
- Output Frequency: 1.538-15.38MHz
- Divide Ratio: 520
- Output Power: -1dBm
- Phase Noise: -144dBc/Hz
- DC Power: 12V
- SMA Connector

Picture



Description

FPS-520-8 is a wideband frequency divider with divide ratio of 520. The AC coupled square wave output with 1.2 Vp-p swing fits many PLL applications.

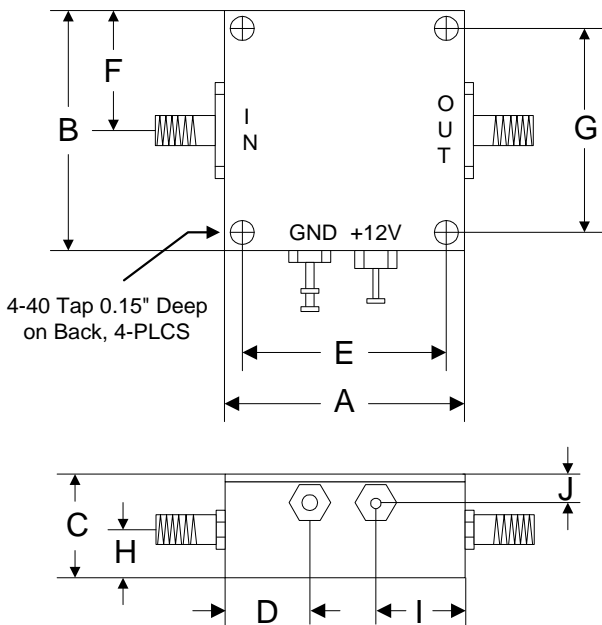
Electrical Specifications @ +25 °C, $Z_S = Z_L = 50$ Ohms

| Parameter | Unit | Minimum | Typical | Maximum |
|---------------------------------|--------|---------|---------|---------|
| Input Frequency Range | GHz | 0.8 | | 8 |
| Output Frequency Range | MHz | 1.538 | | 15.38 |
| Fixed Divide Ratio | | | 520 | |
| Input Power Range | | | | |
| f = 0.8GHz – 3.0GHz | dBm | -10 | -15 | +12 |
| f = 3.0GHz – 7.0GHz | dBm | -3 | -7 | +12 |
| f = 7.0GHz – 8.0GHz | dBm | 0 | -4 | +10 |
| Output Power to 50 Ohm Load | dBm | | -1 | |
| Output Voltage Swing (8pF Load) | Vp-p | 1.0 | 1.2 | |
| SSB Phase Noise (100KHz Offset) | dBc/Hz | | -144 | |
| DC Power Supply | V | 7 | 12 | 15 |
| Supply Current | mA | | 75 | |

Absolute Maximum Ratings

| Parameter | Absolute Maximum |
|-----------------------|-------------------|
| RF Input Power | +15dBm |
| 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 |