

HD25102

0.1 – 15GHz Divide-By-9 Prescaler

Features

- Input Frequency: 0.1-15GHz
- Output Frequency: 0.011-1.67GHz
- Divide Ratio: 9
- Output Power: 4dBm
- Phase Noise: -153dBc/Hz
- DC Power: 5V/205mA
- SMA Connector



Description

HD25102 is a wideband frequency 0.1 – 15GHz divider with divide ratio of 9.

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

| Parameter | Unit | Minimum | Typical | Maximum |
|---------------------------------|--------|---------|---------|---------|
| Input Frequency Range | GHz | 0.1 | | 15 |
| Output Frequency Range | GHz | 0.011 | | 1.667 |
| Fixed Divide Ratio | | 9 | | |
| Input Power Range | | | | |
| f = 0.1GHz – 0.25GHz | dBm | 4 | | +10 |
| f = 0.25GHz – 1GHz | dBm | -4 | | +10 |
| f = 1GHz – 2GHz | dBm | -20 | | +10 |
| f = 2GHz – 10GHz | dBm | -22 | | +10 |
| f = 10GHz – 15GHz | dBm | -17 | | +10 |
| Output Power | | | | |
| f = 0.1GHz – 1GHz | dBm | | +5 | |
| f = 1GHz – 10GHz | dBm | +3 | +4.5 | |
| f = 10GHz – 15GHz | dBm | +3 | +4 | |
| SSB Phase Noise (100KHz Offset) | dBc/Hz | | -153 | |

HD25102

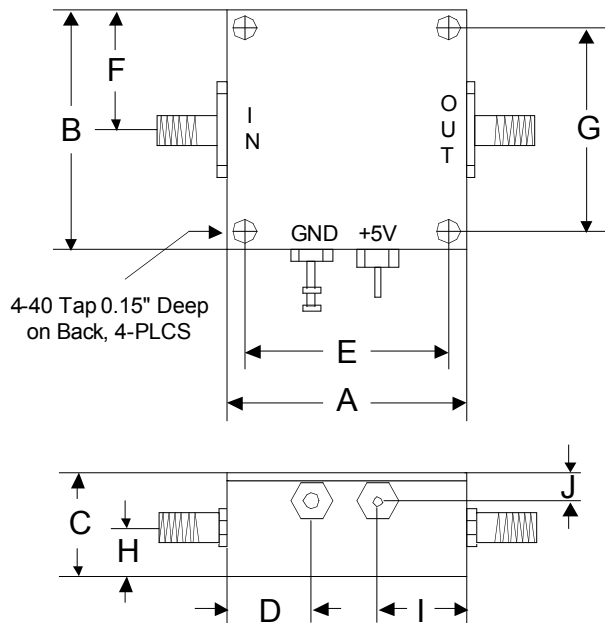
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|-----------------|----|--|-----|--|
| DC Power Supply | V | | 5 | |
| Supply Current | mA | | 205 | |

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 +125 °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 |