

## FPS Series

## 0.1–12GHz Divide-By-2 Prescaler

### Features

- Input Frequency: 0.1-12GHz
- Output Frequency: 0.05-6GHz
- Divide Ratio: 2
- Output Power: +2dBm
- Phase Noise: -145dBc/Hz
- DC Power: 12V
- Internal Voltage Regulator
- Reverse Voltage Protection
- SMA Female Connector

### Picture



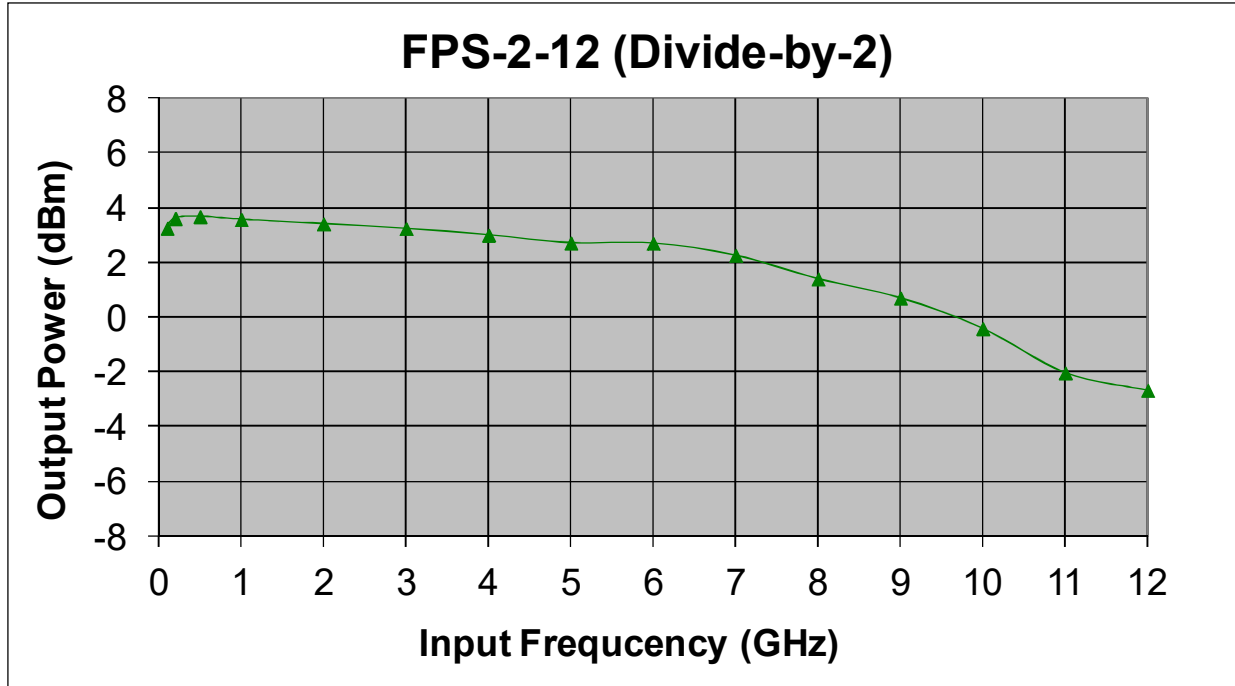
### Description

FPS-2-12 is a wideband frequency 0.1 – 12GHz divider with divide ratio of 2.

### Electrical Specifications @ +25 °C, $Z_{IN} = Z_{OUT} = 50 \Omega$ , DC Supply = +12V

Parameter	Unit	Minimum	Typical	Maximum
Input Frequency Range	GHz	0.1		12
Output Frequency Range	GHz	0.05		6
Fixed Divide Ratio			2	
Input Power Range				
f = 0.1GHz – 1GHz	dBm	-3	0	+10
f = 1GHz – 8GHz	dBm	-15	0	+10
f = 8GHz – 10GHz	dBm	-10	0	+5
f = 10GHz – 12GHz	dBm	-5	0	+5
Output Power				
f = 6GHz	dBm	-2	+2	
f = 8GHz	dBm	-4	0	
f = 10GHz	dBm	-6	-2	
f = 12GHz	dBm	-8	-4	
SSB Phase Noise (100KHz Offset)	dBc/Hz		-145	
DC Power Supply	V	9	12	15
Supply Current	mA		85	100

Typical Performance @ +25 °C



Tested with  $P_{in}=0\text{dBm}$

## FPS Series

## 0.1–12GHz Divide-By-2 Prescaler

### Absolute Maximum Ratings

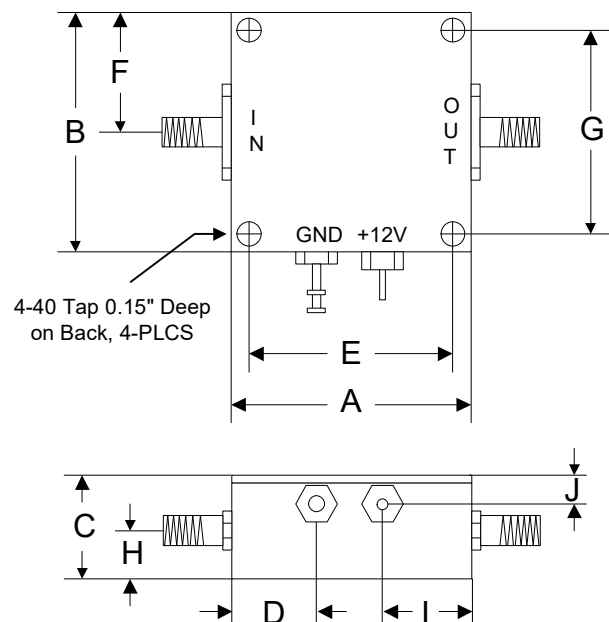
Parameter	Absolute Maximum
RF Input Power	+13dBm
Supply Voltage	+16V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

### ESD Sensitive Material



**WARNING: MUST USE HEAT SINK IF CASE TEMPERATURE EXCEEDS 50 °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