

## FPS Series

## 0.1–24GHz Divide-By-2 Prescaler

### Features

- Input Frequency: 0.1-24GHz
- Output Frequency: 0.05-12GHz
- Divide Ratio: 2
- Output Power: 0dBm
- Phase Noise: -150dBc/Hz
- DC Power: 12V/75mA
- Internal Voltage Regulator
- Reverse Voltage Protection
- SMA Female Connector

### Picture



### Description

FPS-2-24 is a wideband frequency 0.1 – 24GHz divider with divide ratio of 2.

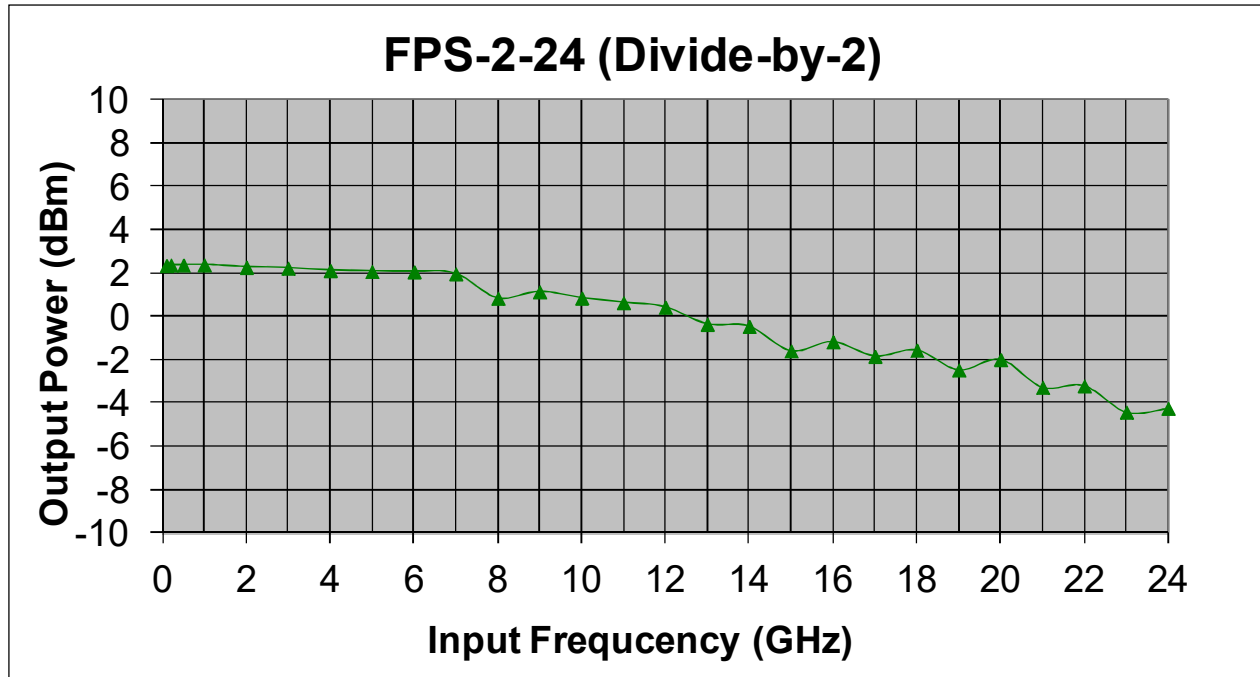
### Electrical Specifications @ +25 °C, $Z_{IN} = Z_{OUT} = 50 \Omega$ , DC Supply = +12V

Parameter	Unit	Minimum	Typical	Maximum
Input Frequency Range	GHz	0.1		24
Output Frequency Range	GHz	0.05		12
Fixed Divide Ratio			2	
Input Power Range				
f = 0.1GHz – 0.3GHz	dBm	+3		+10
f = 0.3GHz – 1GHz	dBm	-5		+10
f = 1GHz – 18GHz	dBm	-15		+10
f = 18GHz – 22GHz	dBm	-5		+10
f = 22GHz – 24GHz	dBm	0		+10
Output Power				
f = 0.1GHz – 8GHz	dBm	-1	+3	
f = 8GHz – 20GHz	dBm	-4	0	
f = 20GHz – 24GHz	dBm	-8	-4	
SSB Phase Noise (100KHz Offset)	dBc/Hz		-150	
DC Power Supply	V	9	12	15
Supply Current	mA		75	90

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Typical Performance @ +25 °C



Tested with

Input 0.1GHz,  $P_{in}=+5\text{dBm}$

Input 0.2-24GHz,  $P_{in}=0\text{dBm}$

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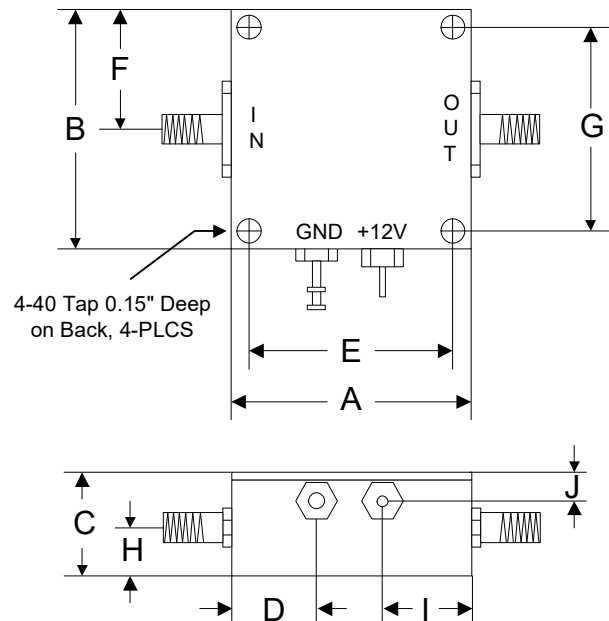
### Absolute Maximum Ratings

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

### ESD Sensitive Material



### 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