

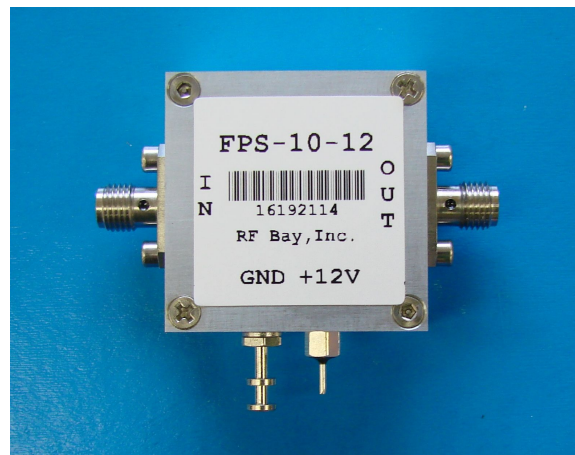
FPS Series

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
- Internal Voltage Regulator
- Reverse Voltage Protection
- SMA Female Connector

Picture



Description

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

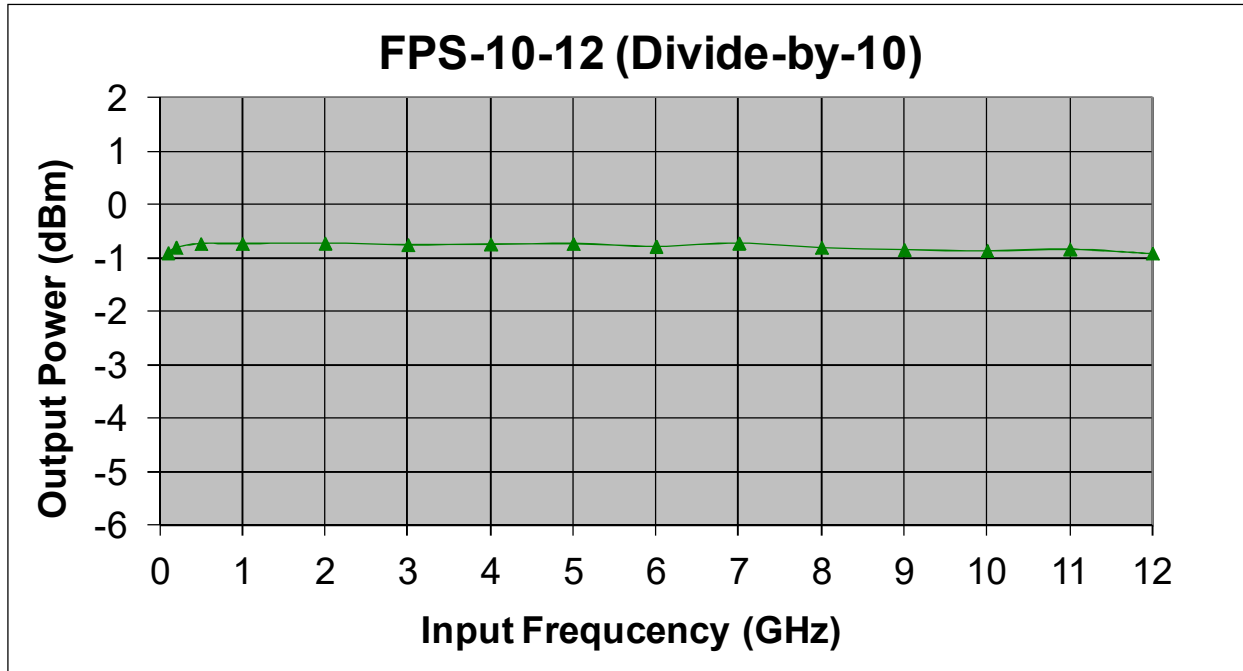
Electrical Specifications @ +25 °C, $Z_{IN} = Z_{OUT} = 50 \Omega$, DC Supply = +12V

Parameter	Unit	Minimum	Typical	Maximum
Input Frequency Range	GHz	0.1		12.5
Output Frequency Range	GHz	0.01		1.25
Fixed Divide Ratio			10	
Input Power Range				
f = 0.1GHz – 1GHz	dBm	-6	0	+10
f = 1GHz – 10GHz	dBm	-15	0	+10
f = 10GHz – 12GHz	dBm	-10	0	+5
f = 12GHz – 12.5GHz	dBm	-4	0	+2
Output Power				
f = 0.1GHz – 12.5GHz	dBm	-4	-1	
SSB Phase Noise (100KHz Offset)	dBc/Hz		-144	
DC Power Supply	V	9	12	15
Supply Current	mA		200	220

FPS Series

0.1–12.5GHz Divide-By-10 Prescaler

Typical Performance @ +25 °C



Tested with $P_{in}=0dBm$

FPS Series

0.1–12.5GHz Divide-By-10 Prescaler

Absolute Maximum Ratings

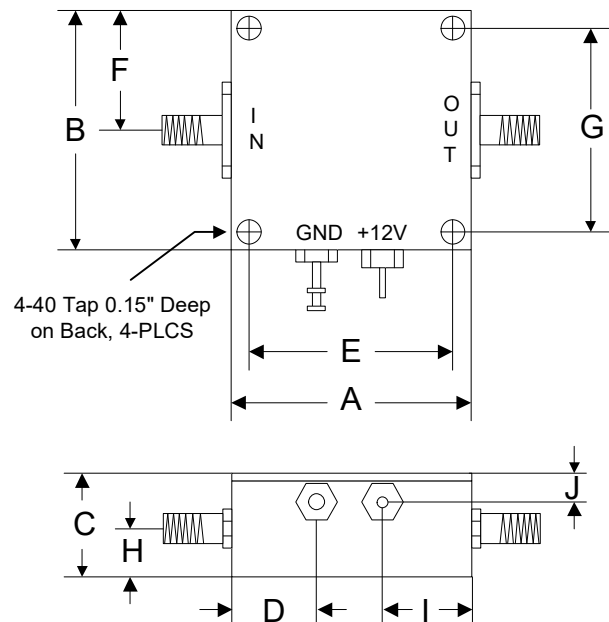
Parameter	Absolute Maximum
RF Input Power	+13dBm
Supply Voltage	+16V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

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