

FBS Series

100MHz – 14GHz Divide-By-N Prescaler

Features

- Input Frequency: 0.1-14GHz
- Output Frequency: F_{in}/N
- Divide Ratio: N (8 to 511 preset)
- Output Power: +1dBm
- Phase Noise: -147dBc/Hz
- DC Power: 5V/260mA
- SMA Connector

Description

FBS-N-14 is a custom build 0.1-14GHz frequency divider with fixed divide ratio of 8 to 511 (N must be specified when ordering). It is designed for PLL applications.

Picture



Electrical Specifications @ +25 °C, $Z_S = Z_L = 50 \Omega$, $V_{supply}=+5V$

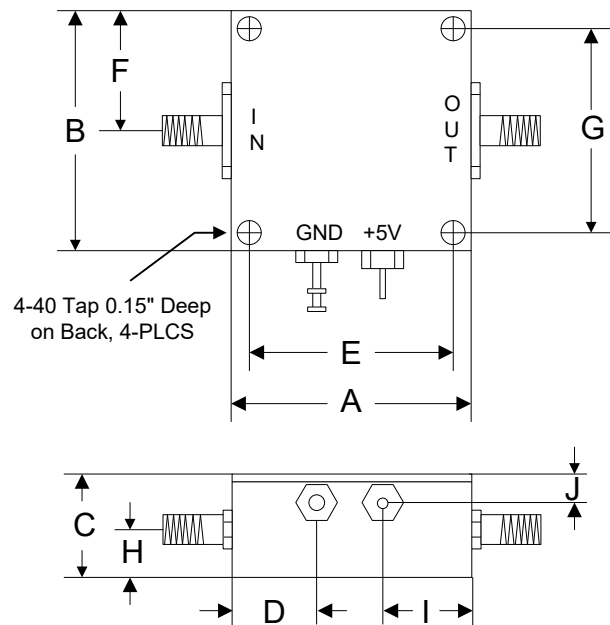
Parameter	Unit	Minimum	Typical	Maximum
Input Frequency Range F_{in}	GHz	0.1		14
Output Frequency Range	GHz		F_{in}/N	
Fixed Divide Ratio		N (Must be between 8 and 511, Factory set)		
Input Power Range				
f = 0.1 – 0.5GHz	dBm	0		+10
f = 0.5 – 2GHz	dBm	-10		+10
f = 2 – 10GHz	dBm	-15		+10
f = 10 – 14GHz	dBm	-10		+10
Output Power	dBm		+1	
SSB Phase Noise (10KHz Offset)	dBc/Hz		-147	
DC Power Supply	V	4.5	5.0	5.5
Supply Current	mA		260	

Order Example: FBS-17-14 (N=17, Divide by 17)

Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+10dBm
Supply Voltage	+12V
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