

100MHz – 15GHz Divide-By-N Prescaler

Features

- Input Frequency: 0.1-15GHz
- Output Frequency: F_{in}/N
- Divide Ratio: N (2 to 500,000)
- Output Power: 0dBm
- Phase Noise: -147dBc/Hz
- DC Power: 5V/230mA
- SMA Connector

Picture



Description

HD31430 is a custom build 0.1-15GHz frequency divider with fixed divide ratio of 2 to 500,000 (N must be specified when ordering). It is designed for PLL applications.

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		15
Output Frequency Range	GHz		F_{in}/N	
Fixed Divide Ratio		N (Must be between 2 and 500,000)		
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 – 15GHz	dBm	-10		+10
Output Power	dBm		0	
SSB Phase Noise (10KHz Offset)	dBc/Hz		-147	
DC Power Supply	V	4.5	5.0	5.5
Supply Current	mA		230	



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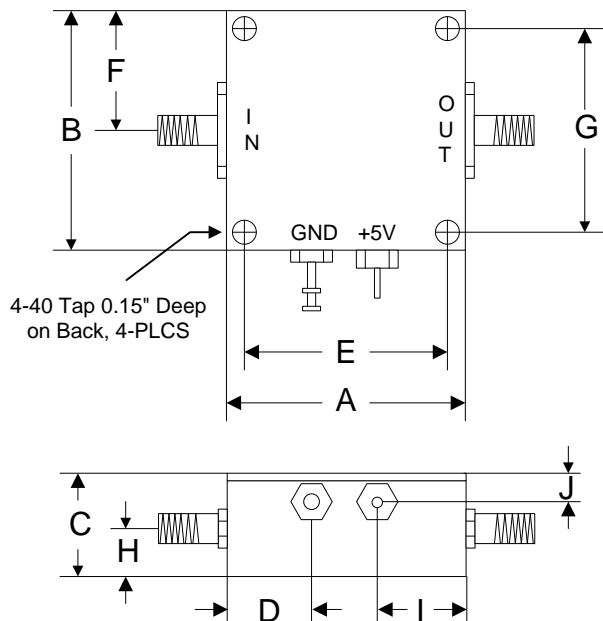
Order Example: FBS-3-15 (N=3, Divide by 3)

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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