

DC – 50MHz Divide-By-N Prescaler

Features

- Input Frequency: Up to 50MHz
- Output Frequency: F_{in}/N
- Divide Ratio: N (2 to 256 preset)
- Input/Output Level: CMOS
- Phase Noise: -144dBc/Hz
- DC Power: 12V
- SMA Connector

Description

HD31402 is a 50MHz frequency divider with divide ratio of 2 to 256 (N must be specified when ordering). The DC coupled CMOS logic level input and output will fit many PLL applications.

Picture



Electrical Specifications @ +25 °C, Vsupply=+12V

Parameter	Unit	Minimum	Typical	Maximum
Input Frequency Range F_{in}	MHz	0		50
Output Frequency Range	MHz		F_{in}/N	
Fixed Divide Ratio		N (Must be between 2 and 256, Factory set)		
HIGH Level Input Voltage	V	3.5		
LOW Level Input Voltage	V			1.5
HIGH Level Output Voltage	V	4.9		
LOW Level Output Voltage	V			0.1
Output Voltage Swing (8pF Load)	Vp-p	4.8	5.0	
SSB Phase Noise (100KHz Offset)	dBc/Hz		-144	
DC Power Supply	V	7	12	24
Supply Current	mA		70	



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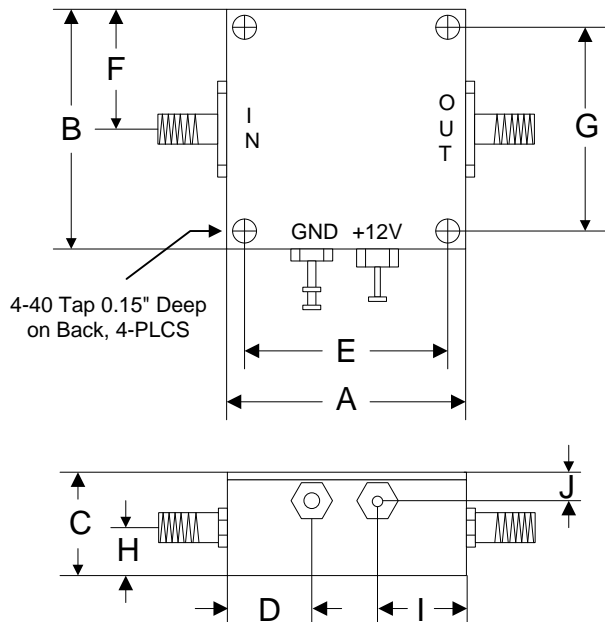
Order Example: FDS-2 (N=2, Divide by 2)

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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+20dBm
Supply Voltage	+25V
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