

## 0.5 – 6.0GHz Divide-By-165 Prescaler

### Features

- Input Frequency: 0.5-6.0GHz
- Output Frequency: 3.03-36.36MHz
- Divide Ratio: 165
- Output Power: -1dBm
- Phase Noise: -144dBc/Hz
- DC Power: 12V
- SMA Connector

### Description

HD32555 is a wideband frequency divider with divide ratio of 165. The AC coupled square wave output with 1.2 Vp-p swing fits many PLL applications.

### Picture



### Electrical Specifications @ +25 °C, $Z_S = Z_L = 50 \text{ Ohms}$

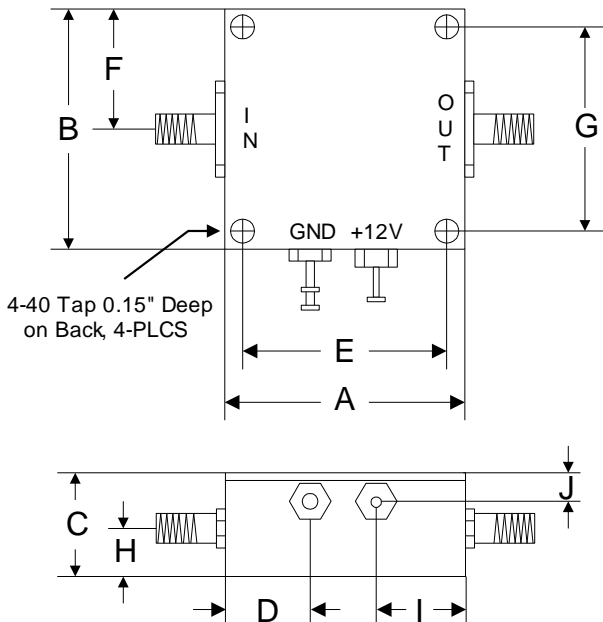
Parameter	Unit	Minimum	Typical	Maximum
Input Frequency Range	GHz	0.5		6.0
Output Frequency Range	MHz	3.03		36.36
Fixed Divide Ratio			165	
Input Power Range				
f = 0.5GHz – 1.0GHz	dBm	-11	-15	+12
f = 1.0GHz – 6.0GHz	dBm	-12	-15	+12
Output Power to 50 Ohm Load	dBm		-1	
Output Voltage Swing (8pF Load)	Vp-p	1.0	1.2	
SSB Phase Noise (100KHz Offset)	dBc/Hz		-144	
DC Power Supply	V	7	12	15
Supply Current	mA		85	

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### 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 +100 °C

### Outline



	A	B	C	D	E	F	G	H	I	J
<b>Inch</b>	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187
<b>mm</b>	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76