

## DCA 50 $\Omega$ Series

## 0Hz – 50MHz DC Coupled Amplifier

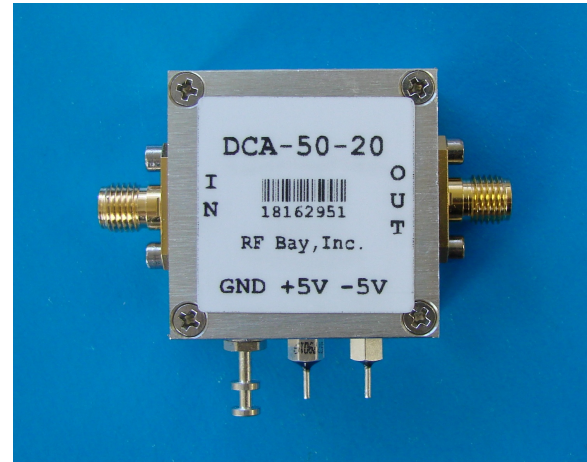
### Features

- 1-dB Bandwidth: 50MHz
- Gain: 20dB
- $P_{1dB}$ : +14dBm
- IP3: +25dBm
- Input/Output: 50  $\Omega$
- DC Power:  $\pm 5V$
- SMA Connector

### Description

DCA-50-20 is a 50  $\Omega$  20dB gain DC Coupled Amplifier operates with 1-dB bandwidth of 50MHz, designed for low frequency, small signal application.

### Picture



### Electrical Specifications @ +25 $^{\circ}C$ , $Z_{in}$ , $Z_{out} = 50 \Omega$ , $V_{supply} = \pm 5V$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range (-1dB)	MHz	0		50
Power Gain $G_{21}$ $f = 0Hz$	dB		20.0	
$f = 25MHz$	dB		19.9	
$f = 50MHz$	dB		19.4	
Voltage Gain ( $RL = \infty$ ) $f = 0 Hz$			20	
$P_{1dB}$ $f = 100KHz$	dBm		+14	
$f = 25MHz$	dBm		+14	
$f = 50MHz$	dBm		+6	
IP3 $f = 25MHz$	dBm		+25	
Input Voltage Noise	nV/ $\sqrt{Hz}$		0.92	
Reverse Isolation S12	dB		-50	
Output Voltage $f = 100KHz$ $RL = \infty$	Vp-p		7.4	
$Pin = -5dBm$ $f = 50MHz$ $RL = \infty$	Vp-p		3.6	
VSWR Input VSWR S11			1.1:1	
Output VSWR S22			1.1:1	
DC Power Supply	V	$\pm 4.5$	$\pm 5$	$\pm 5.5$
Supply Current	mA		$\pm 20$	

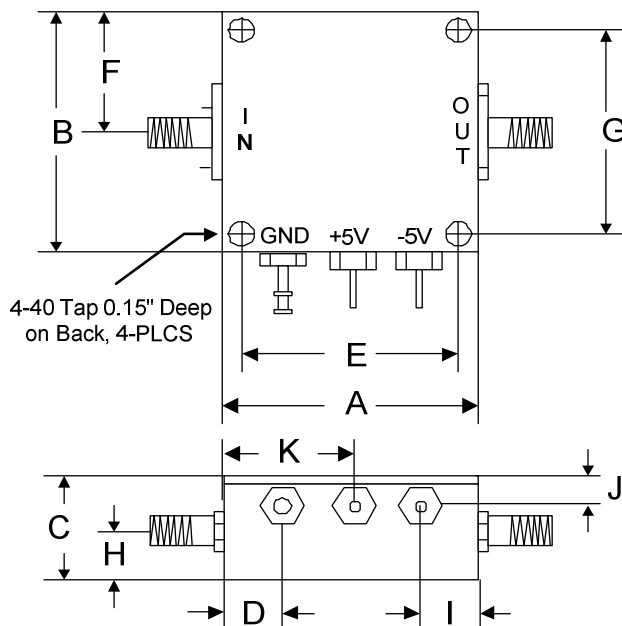
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### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+13dBm
Input DC Voltage	± 2V
Supply Voltage	±6V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

### Outline



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