

## DCA 50 $\Omega$ Series

## 0Hz – 6.5MHz DC Coupled Amplifier

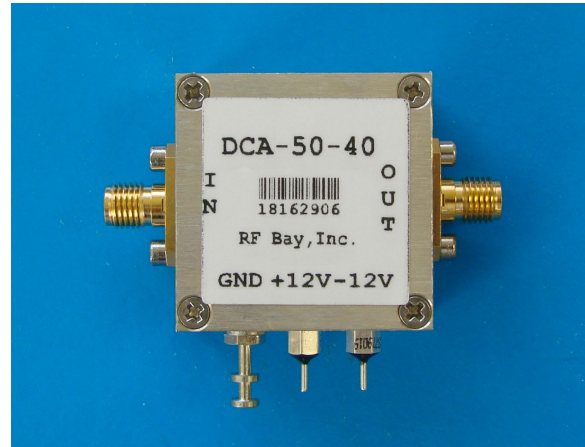
### Features

- 3-dB Bandwidth: 6.5MHz
- Gain: 40dB
- $P_{1dB}$ : +14dBm
- IP3: +25dBm
- Input/Output: 50  $\Omega$
- DC Power:  $\pm 12V$
- Internally Voltage Regulated
- SMA Connector

### Description

DCA-50-40 is a 50  $\Omega$  40dB gain DC Coupled Amplifier operates with 3-dB bandwidth of 6.5MHz, designed for low frequency, small signal application.

### Picture



### Electrical Specifications @ +25 °C, $Z_{in}$ , $Z_{out} = 50 \Omega$ , $V_{supply} = \pm 12V$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range (-3dB)	MHz	0		6.5
Power Gain $G_{21}$ $f = 0Hz$	dB		40.0	
$f = 3MHz$	dB		39.0	
$f = 6.5MHz$	dB		37.0	
Voltage Gain ( $R_L = \infty$ ) $f = 0 Hz$			200	
$P_{1dB}$	dBm		+14	
IP3	dBm		+25	
Input Voltage Noise	nV/ $\sqrt{Hz}$		0.92	
Reverse Isolation S12	dB		-55	
Output Voltage $f = 100KHz$ $R_L = \infty$	Vp-p		7.7	
Pin= -24dBm $f = 6.5MHz$ $R_L = \infty$	Vp-p		5.9	
VSWR Input VSWR S11			1.1:1	
Output VSWR S22			1.1:1	
DC Power Supply	V	$\pm 9$	$\pm 12$	$\pm 15$
Supply Current	mA		$\pm 25$	

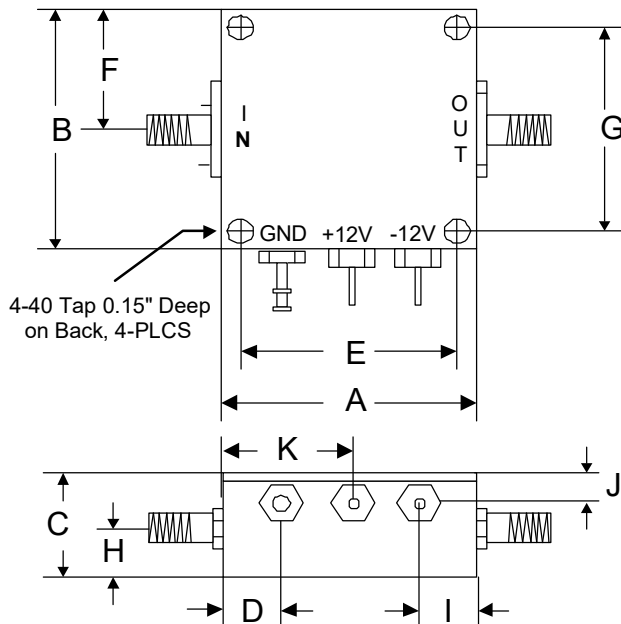
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### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+13dBm
Input DC Voltage	± 2V
Supply Voltage	±25V
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
<b>Inch</b>	1.250	1.250	0.563	0.325	1.000	0.625	1.000	0.250	0.325	0.187	0.625
<b>mm</b>	31.75	31.75	14.29	8.26	25.40	15.88	25.40	6.35	8.26	4.76	15.88