

DCA 50 Ω Series

0Hz – 15MHz DC Coupled Amplifier

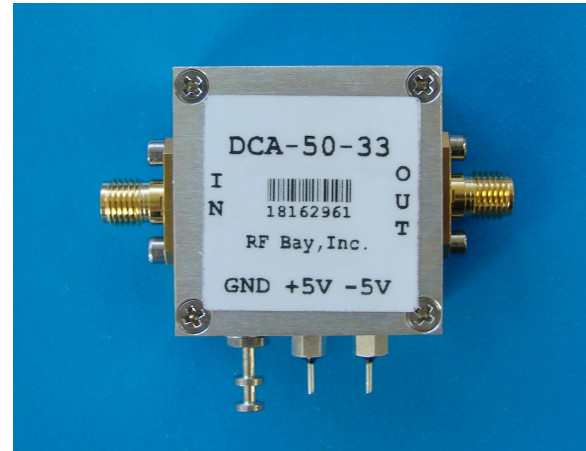
Features

- 3-dB Bandwidth: 15MHz
- Gain: 33dB
- P_{1dB} : +14dBm
- IP3: +25dBm
- Input/Output: 50 Ω
- DC Power: $\pm 5V$
- SMA Connector

Description

DCA-50-33 is a 50 Ω 33dB gain DC Coupled Amplifier operates with 3-dB bandwidth of 15MHz, designed for low frequency, small signal application.

Picture



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

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range (-3dB)	MHz	0		15
Power Gain G_{21} $f = 0Hz$	dB		33.0	
$f = 7.5MHz$	dB		32.3	
$f = 15MHz$	dB		30.0	
Voltage Gain ($R_L = \infty$) $f = 0 Hz$			90	
P_{1dB}	dBm		+14	
IP3	dBm		+25	
Input Voltage Noise	nV/ \sqrt{Hz}		0.92	
Reverse Isolation S12	dB		-50	
Output Voltage $f = 100KHz$ $R_L = \infty$	Vp-p		7.3	
Pin= -18dBm $f = 15MHz$ $R_L = \infty$	Vp-p		5.0	
VSWR Input VSWR S11			1.1:1	
Output VSWR S22			1.1:1	
DC Power Supply	V	± 4.5	± 5	± 5.5
Supply Current	mA		± 20	

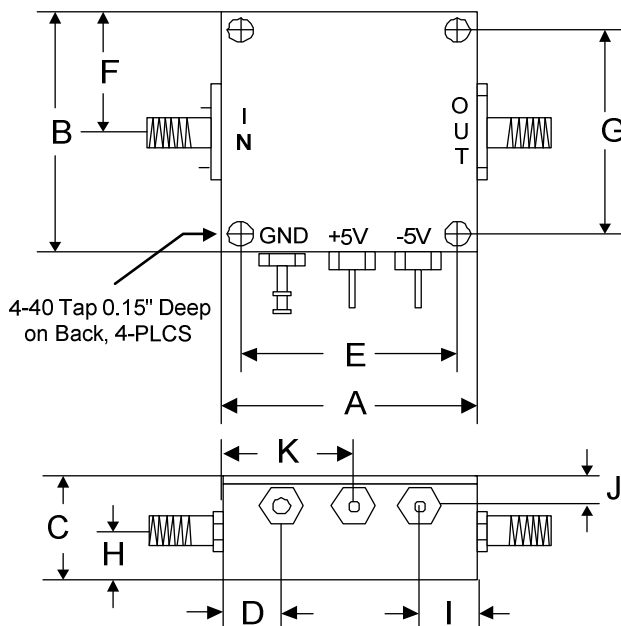
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Absolute Maximum Ratings

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