

DCA 50 Ω Series

0Hz – 0.5MHz DC Coupled Amplifier

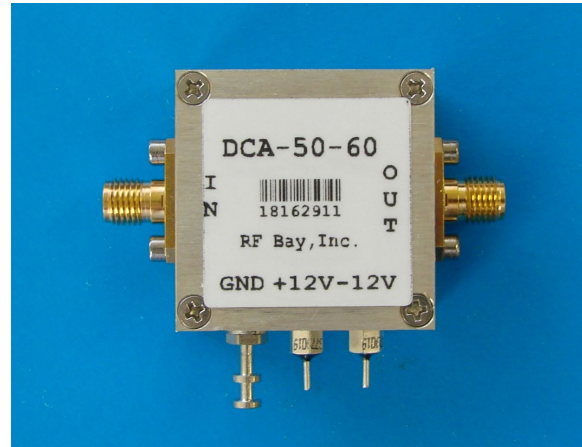
Features

- 3-dB Bandwidth: 0.5MHz
- Gain: 60dB
- P_{1dB} : +14dBm
- IP3: +25dBm
- Input/Output: 50 Ω
- DC Power: $\pm 12V$
- Internally Voltage Regulated
- SMA Connector

Description

DCA-50-60 is a 50 Ω 60dB gain DC Coupled Amplifier operates with 3-dB bandwidth of 0.5MHz, 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		0.5
Power Gain G_{21} $f = 0Hz$	dB		60.0	
$f = 0.2MHz$	dB		58.5	
$f = 0.5MHz$	dB		57.0	
Voltage Gain ($R_L = \infty$) $f = 0 Hz$			2000	
P_{1dB}	dBm		+14	
IP3	dBm		+25	
Input Voltage Noise	nV/ \sqrt{Hz}		0.92	
Reverse Isolation S12	dB		-50	
Output Voltage $f = 10KHz$ $R_L = \infty$	Vp-p		7.0	
Pin= -44dBm $f = 0.5MHz$ $R_L = \infty$	Vp-p		6.2	
VSWR Input VSWR S11			1.4:1	
Output VSWR S22			1.2:1	
DC Power Supply	V	± 9	± 12	± 15
Supply Current	mA		± 25	

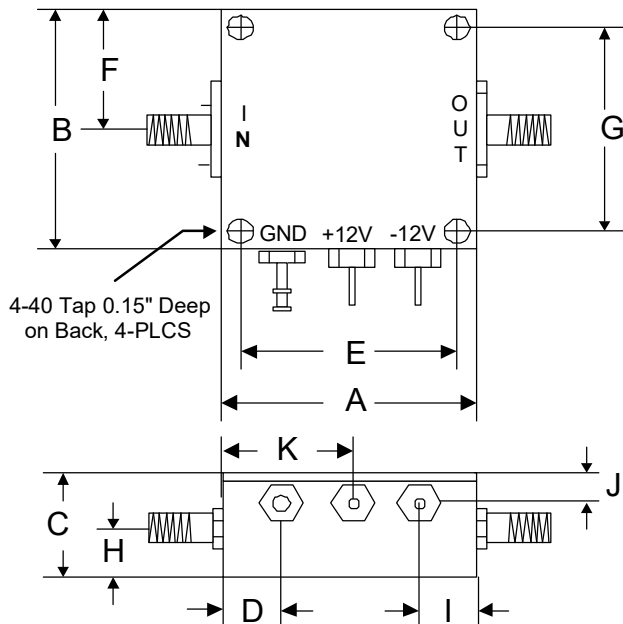
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Absolute Maximum Ratings

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
Inch	1.250	1.250	0.563	0.325	1.000	0.625	1.000	0.250	0.325	0.187	0.625
mm	31.75	31.75	14.29	8.26	25.40	15.88	25.40	6.35	8.26	4.76	15.88