

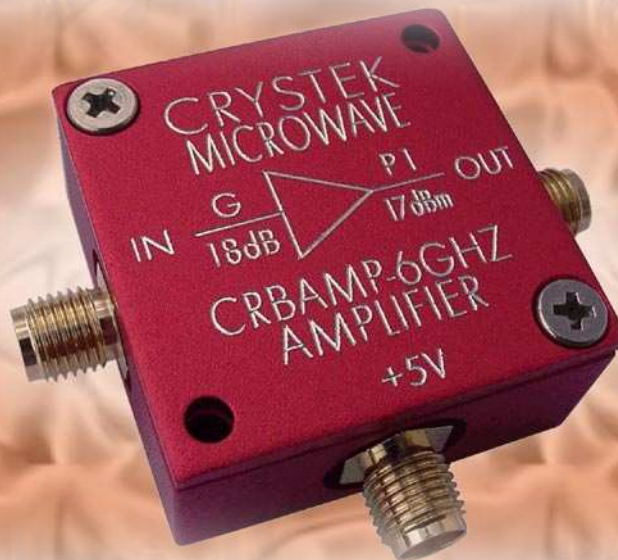


# RedBox

## AMPLIFIER

100MHZ TO 6.0GHZ

MODEL: CRBAMP-100-6000



Crystek continues to enhance its product portfolio with the release of the **RedBox** Amplifier. Crystek's model CRBAMP-100-6000 is a low-noise general purpose connectorized amplifier covering a frequency range of 100MHz to 6GHz. The amplifier is housed in a custom aluminum enclosure (1.25" x 1.25" x 0.59") with 3 SMA connectors for both input and output as well as the power supply input. The unit operates from a single +5V supply consuming only 60mA.

This broadband, low-noise amplifier has a small signal gain of 18dB with an output power of 17dBm (P1dB). It features a typical noise figure of 3.5dB with an IP3 of +30dBm.

Applications include IF or RF buffer amplifiers, base stations, high reliability applications and general lab use for in-house testing.



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Rev.: A  
Date: 05-19-08



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### Electrical Characteristics

TA=25 ° C, V<sub>CC</sub>=+5V, Z<sub>0</sub>=50 Ohms

Parameter	Min.	Typ.	Max	Units
Frequency Range	100		6000	MHz
Gain		18		dB
Output Power P1dB		17		dBm
Output IP3		30		dBm
Noise Figure		3.5		dB
Supply Voltage	4.75	5.0	5.25	VDc
Operating Current		60		mA
Reverse Isolation		22		dB
Input VSWR			1.9:1	
Output VSWR			2.1:1	

### Absolute Maximum Rating

Parameter	Rating	Units
Input Power	+13	dBm
Power Supply	+5.5	VDc
Ambient Temperature	-40 to +85	°C
Storage Temperature	-45 to +90	°C



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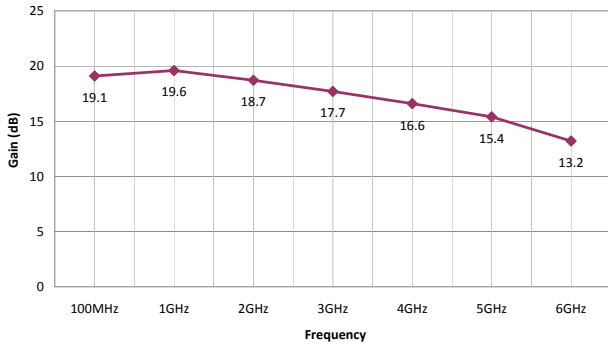
# RedBox

## AMPLIFIER

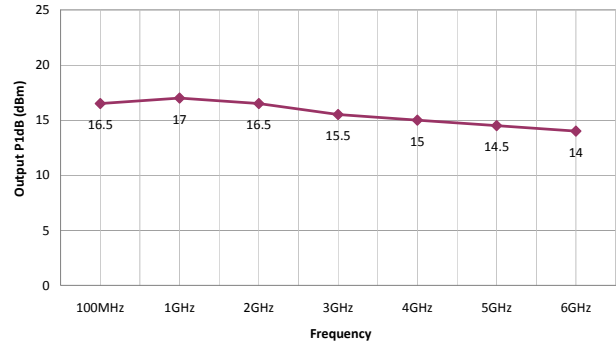
100MHz TO 6.0GHz

MODEL: CRBAMP-100-6000

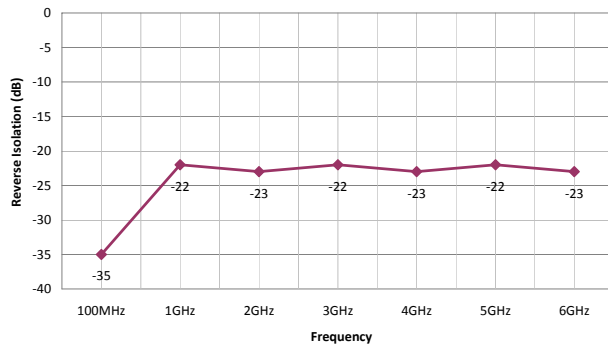
Gain vs. Frequency



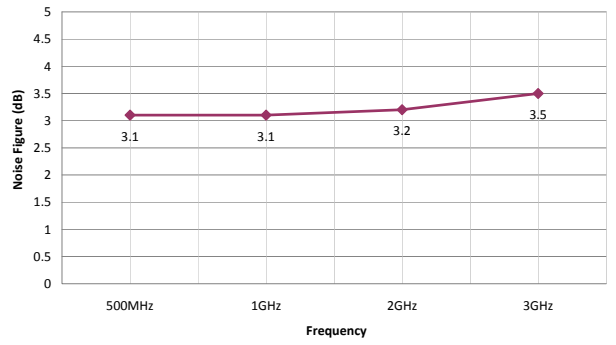
Output P1dB vs. Frequency



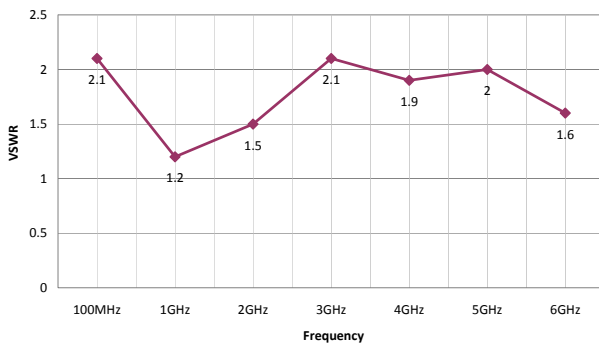
Reverse Isolation vs. Frequency



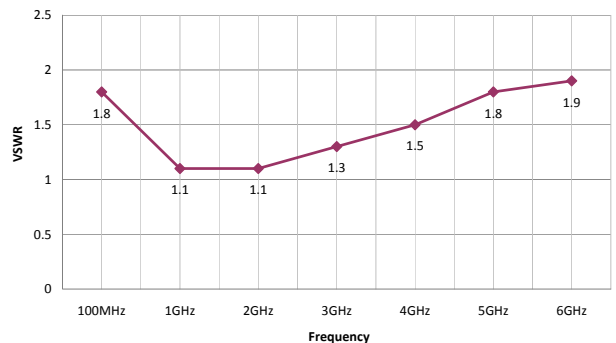
Noise Figure vs. Frequency



Output VSWR vs. Frequency



Input VSWR vs. Frequency



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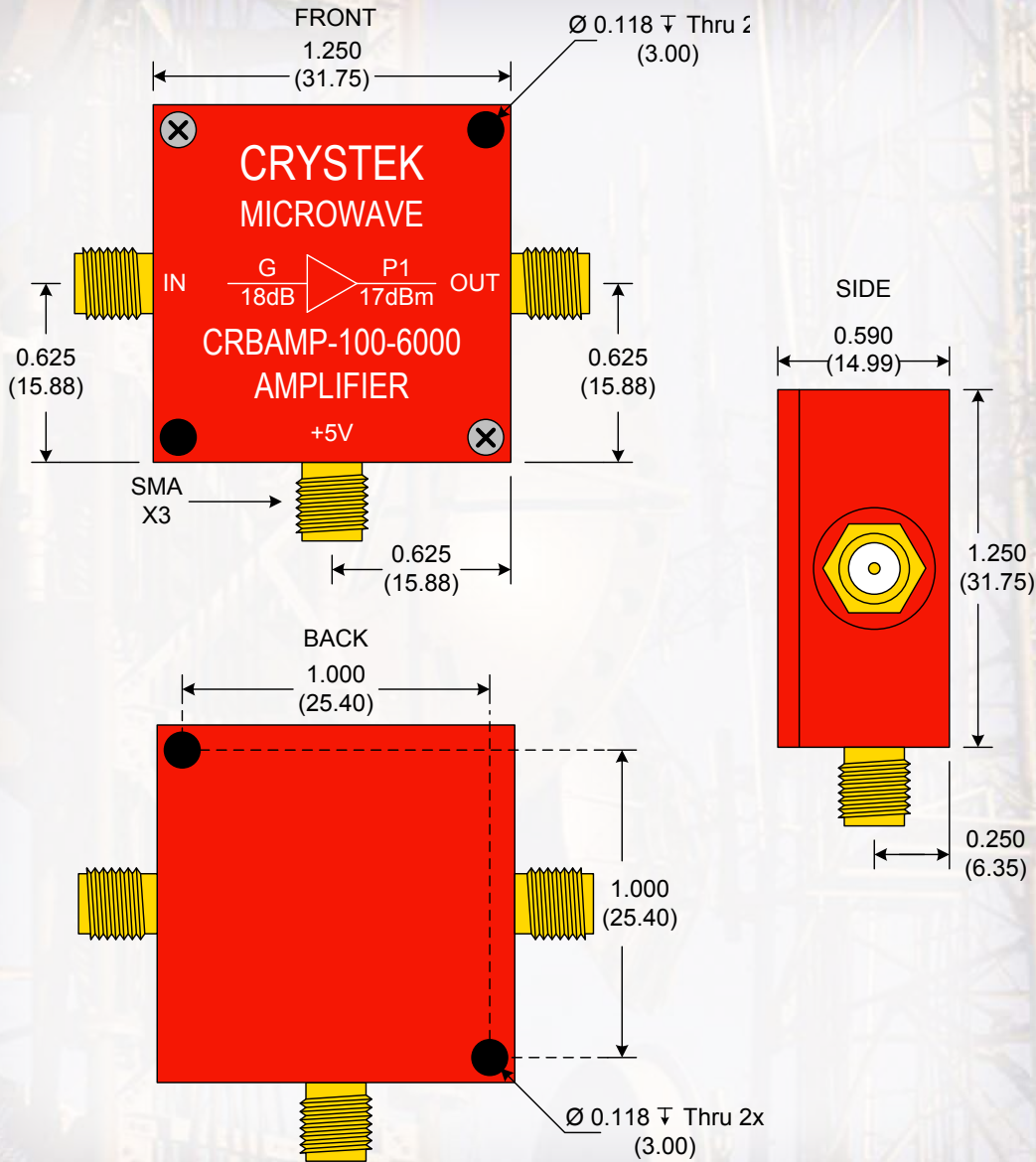
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**RedBox**

MODEL: CRBAMP-100-6000

**AMPLIFIER**

100MHZ TO 6.0GHZ



**How to Order:**

**PN: CRBAMP-100-6000**

**RedBox** Amplifiers are available in-stock at our catalog distributor locations.

Crystek also offers a line of SMA cables.



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