



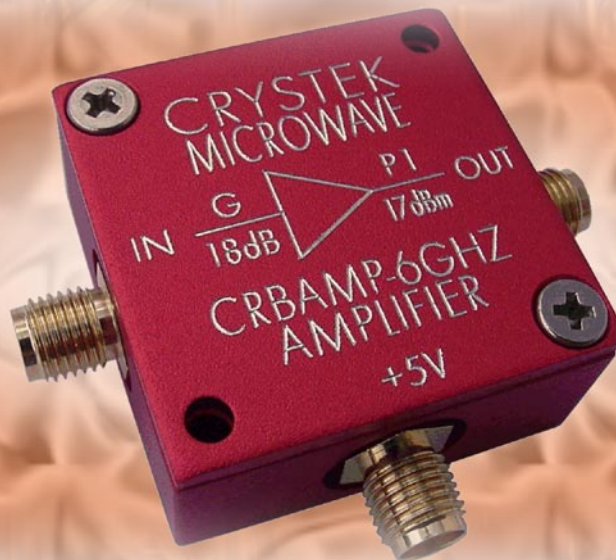
CRYSTEK
MICROWAVE
A DIVISION OF CRYSTEK CORPORATION

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.



CRYSTEK
CORPORATION

12730 COMMONWEALTH DRIVE • FORT MYERS, FL 33913
PHONE: 239-561-3311 • 800-237-3061
FAX: 239-561-1025 • WWW.CRYSTEK.COM

Rev.: A
Date: 05-19-08



CRYSTEK
MICROWAVE
A DIVISION OF CRYSTEK CORPORATION

RedBox

AMPLIFIER

100MHZ TO 6.0GHZ

MODEL: CRBAMP-100-6000

Electrical Characteristics

TA=25 ° C, V_{CC}=+5V, Z₀=50 Ohms

Parameter	Min.	Typ.	Max	Units
Frequency Range	100		6000	MHz
Gain		18		dB
Output Power P _{1dB}		17		dBm
Output IP ₃		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



CRYSTEK
CORPORATION

12730 COMMONWEALTH DRIVE • FORT MYERS, FL 33913

PHONE: 239-561-3311 • 800-237-3061

FAX: 239-561-1025 • WWW.CRYSTEK.COM

Rev.: A
Date: 05-19-08



CRYSTEK
MICROWAVE
A DIVISION OF CRYSTEK CORPORATION

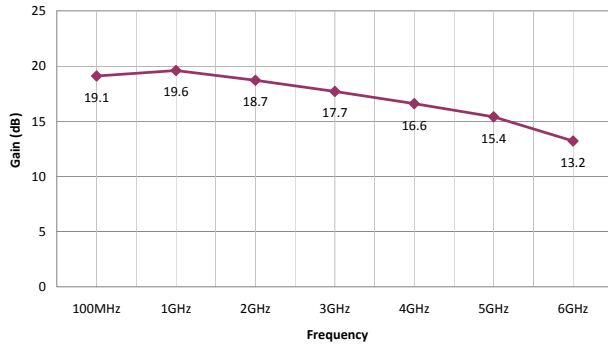
RedBox

AMPLIFIER

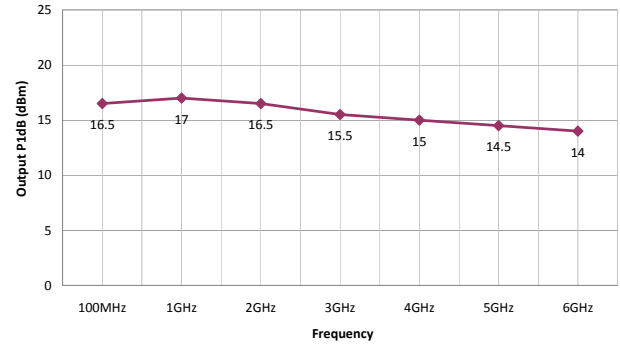
100MHz TO 6.0GHz

MODEL: CRBAMP-100-6000

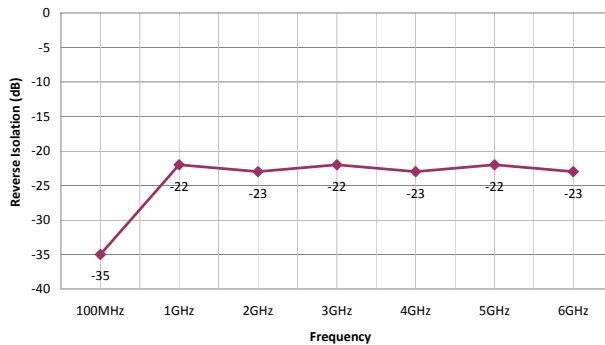
Gain vs. Frequency



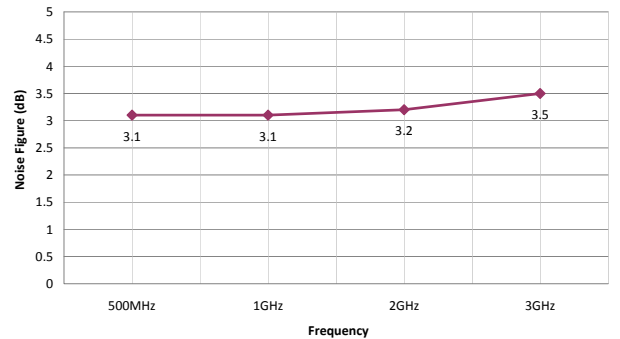
Output P1dB vs. Frequency



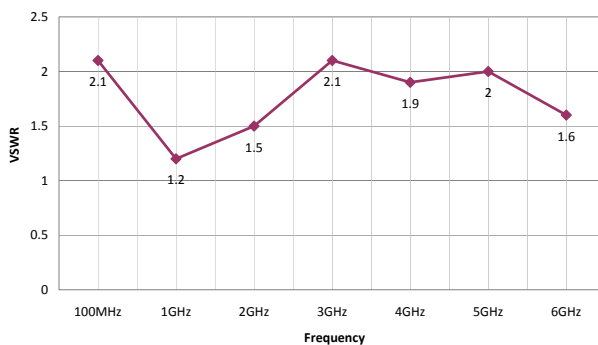
Reverse Isolation vs. Frequency



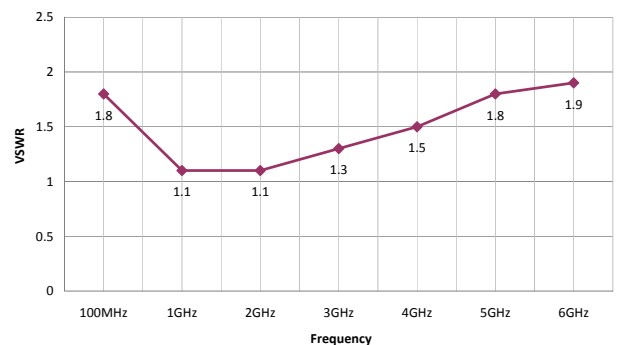
Noise Figure vs. Frequency



Output VSWR vs. Frequency



Input VSWR vs. Frequency



CRYSTEK
CORPORATION

12730 COMMONWEALTH DRIVE • FORT MYERS, FL 33913
PHONE: 239-561-3311 • 800-237-3061
FAX: 239-561-1025 • WWW.CRYSTEK.COM

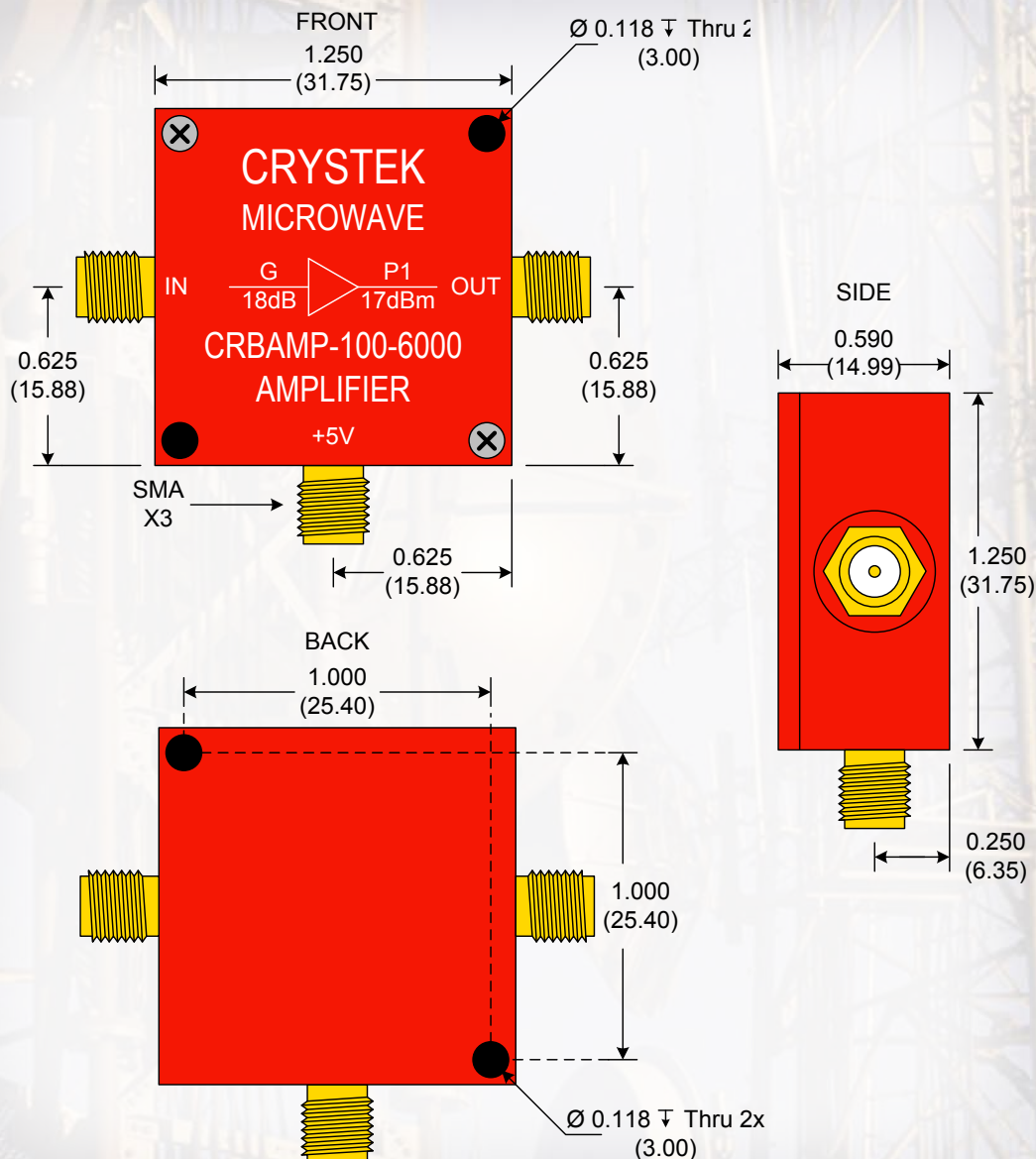
Rev.: A
Date: 05-19-08



AMPLIFIER

100MHz TO 6.0GHz

MODEL: CRBAMP-100-6000



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.



CRYSTEK
CORPORATION

12730 COMMONWEALTH DRIVE • FORT MYERS, FL 33913

PHONE: 239-561-3311 • 800-237-3061

FAX: 239-561-1025 • WWW.CRYSTEK.COM

Rev.: A
Date: 05-19-08