



DATA SHEET 2GHz Broad Band Amplifier DBA-IV

The DBA-IV is a replacement or enhanced version of the DBA-III developed at GSI-Germany with a larger gain range. It is non-inverting and is mounted in a solid case 95x47x25mm LWH. The gain is remotely controlled by a voltage between 0V and 5V DC. The available flat gain ranges from +10 dB to +50 dB.

The input is protected against a short circuit at the detector input for bias voltage within -600V to +100V. The power supply and remote gain control have a common 4 pole LEMO connector (FFA.OS.304.CLAC37 supplied with amplifier), its pin assignment is defined below:-

Lemo 4-pin connector assignment

Pin-1 +12V (approx 150mA (300mA))
 Pin-2 Control Voltage (0..5V).
 Pin-3 & 4 Ground

If multiple channels are used, a common external voltage may be supplied for UGain. The gain variation from unit to unit does not exceed +/- 2 dB typically.

DBA-IV additional technical information:

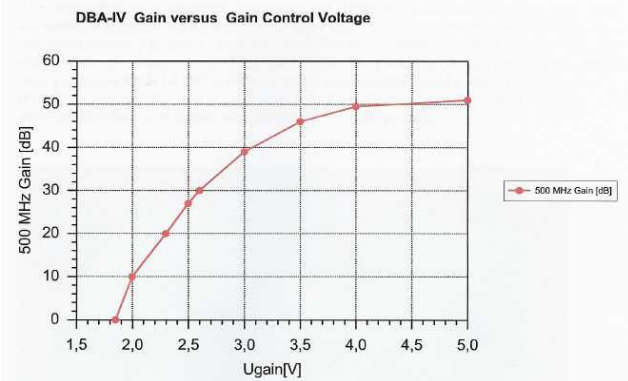


Fig. C3 - DBA-IV Gain at 500 MHz versus Gain Control Voltage

Type	DBA-IV
Description	GaAs 3-stage MMIC Non-Inverting Broadband Amplifier
Bandwidth (-3dB)	0.003-2.0GHz
Gain max	+50 dB
Gain min	+10 dB (Gain remote control 0-5V DC)
Input impedance	50 Ohms, SWR <1.5
Output impedance	50 Ohms, SWR <1.5
Noise Figure (input terminated)	5 dB
Max Input Voltage at min Gain	1 V _{peak}
Max Output Power Level	+18dBm/ 2V _{peak}
Max Bias Voltage for the detector	+/- 2000V (no damage at detector input for shorts for in the range -600V/+100V bias range)
Power Supply	+12V, 150mA
Dimension	Length: 95mm, Width 47mm, Height 25mm
Connectors	RF in/out, Bias: SMA; Power/Remote Gain Lemo 4 pole

CAUTION

High Voltage Potentially Present on Amplifier

Bias input protected in the range -600V to +100V ONLY.