

## CBA6G-050D

### 1.0 GHz to 6.0 GHz 50 Watt P1dB Class A Solid State Amplifier

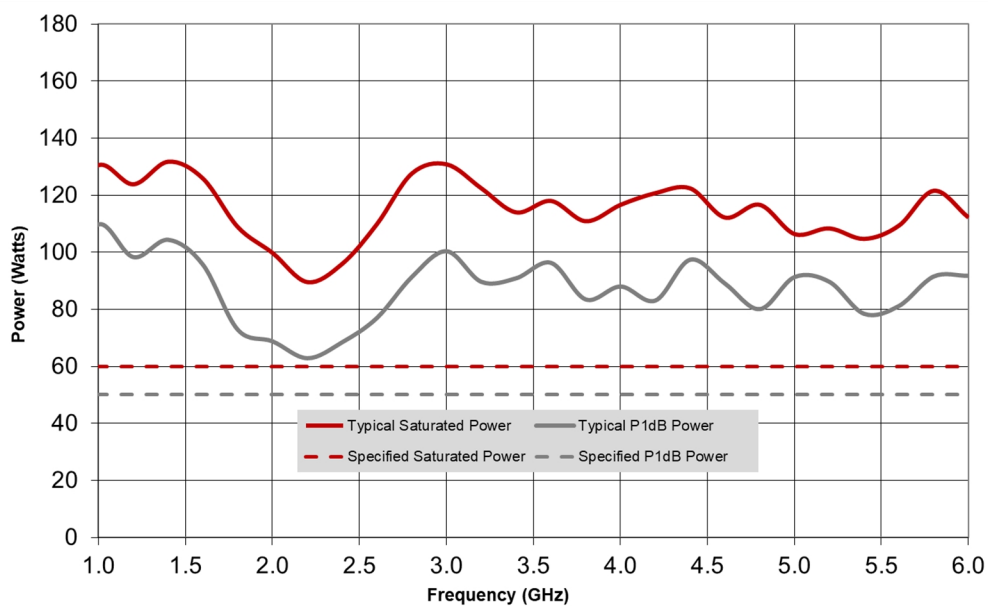


New class A, high power density, design has allowed us to produce a 50 watt, 1.0 GHz to 6 GHz amplifier in a compact 4U package. With a minimum of 50 watts of linear power this amplifier is ideal for RF immunity testing in a GTEM Cell or with a wide range of available horn antenna such as the Teseq BHA range. Readily integrated with the Teseq NSG 80 MHz to 6 GHz test system these amplifiers can form part of a broadband RF test system. The new touch screen colour display gives an immediate visual indication of forward and reverse power along with the current operating status of the amplifier and access to diagnostic information such as gate current and heatsink temperature.

#### MAIN FEATURES

- Class A Operation
- 100% Mismatch Tolerant with no Foldback
- Ethernet, USB, RS232 & GPIB Interface
- Built in Calibrated Directional Coupler
- 3 Year Warranty

Fan speed adjusts depending on the heatsink temperature thus ensuring the minimum audio noise level possible in the operating environment. The inbuilt calibrated forward power coupler provides a quick and easy way to monitor forward power with any power meter. Input overdrive protection prevents damage to the input devices due to accidental high input power. Multiple remote interfaces are available as standard including USB, GPIB, RS232, and Ethernet. Amplifier gain can be controlled either remotely through one of the available interfaces or via the front panel touch screen.



## Technical Specifications

|                                 |                                  |
|---------------------------------|----------------------------------|
| Frequency Bands                 | Single Band                      |
| Frequency (min.) GHz            | 1 GHz                            |
| Frequency (max.) GHz            | 6 GHz                            |
| Psat (min)                      | 60 W                             |
| P1dB (min.)                     | 50 W                             |
| Small Signal Gain               | 47 dB                            |
| Gain Variation (max) ±          | +/- 3.0 dB                       |
| Harmonics @ P1dB                | -18 dBc                          |
| Spurious (min.)                 | -70 dBc                          |
| 3rd Order Intercept Point       | 10 dB > P1dB                     |
| Modulation Formats              | AM, FM, Pulse                    |
| Maximum Input Power (no damage) | 10 dBm                           |
| Gain Control                    | 0-30 dB in 255 Steps             |
| Output VSWR Tolerance           | Infinite any phase (no foldback) |
| Stability                       | Unconditional                    |
| Output Impedance                | 50 Ohm                           |
| Input VSWR                      | 2:1 (max)                        |
| Output VSWR                     | 2:1 (typical)                    |

## General Specifications

|                     |                                   |
|---------------------|-----------------------------------|
| Safety Interlock    | Via rear panel mounted BNC-female |
| Supply Voltage      | 90 to 264 VAC                     |
| Supply Frequency    | 47 to 63                          |
| Supply Power (typ.) | 0.65 kVA                          |
| RF Input Connector  | Type N female                     |
| RF Output Connector | Type N female                     |
| Com. Interface      | GPIO, RS232, Ethernet & USB       |
| Weight kg           | 20 kg                             |
| Dimensions          | 19 inch, 4U, 615mm (WxHxD)        |
| Cooling System      | Air Cooled, Self-contained        |

## Available Variants

| Product        | Configuration             | Item #   |
|----------------|---------------------------|----------|
| CBA6G-050D-001 | Front Panel RF Connectors | 3-342426 |
| CBA6G-050D-002 | Rear Panel RF Connectors  | 3-342427 |