

CBA20M6G-050-050D

20 MHz - 6.0 GHz 50 Watt P1dB Dual Band Solid State Amplifier

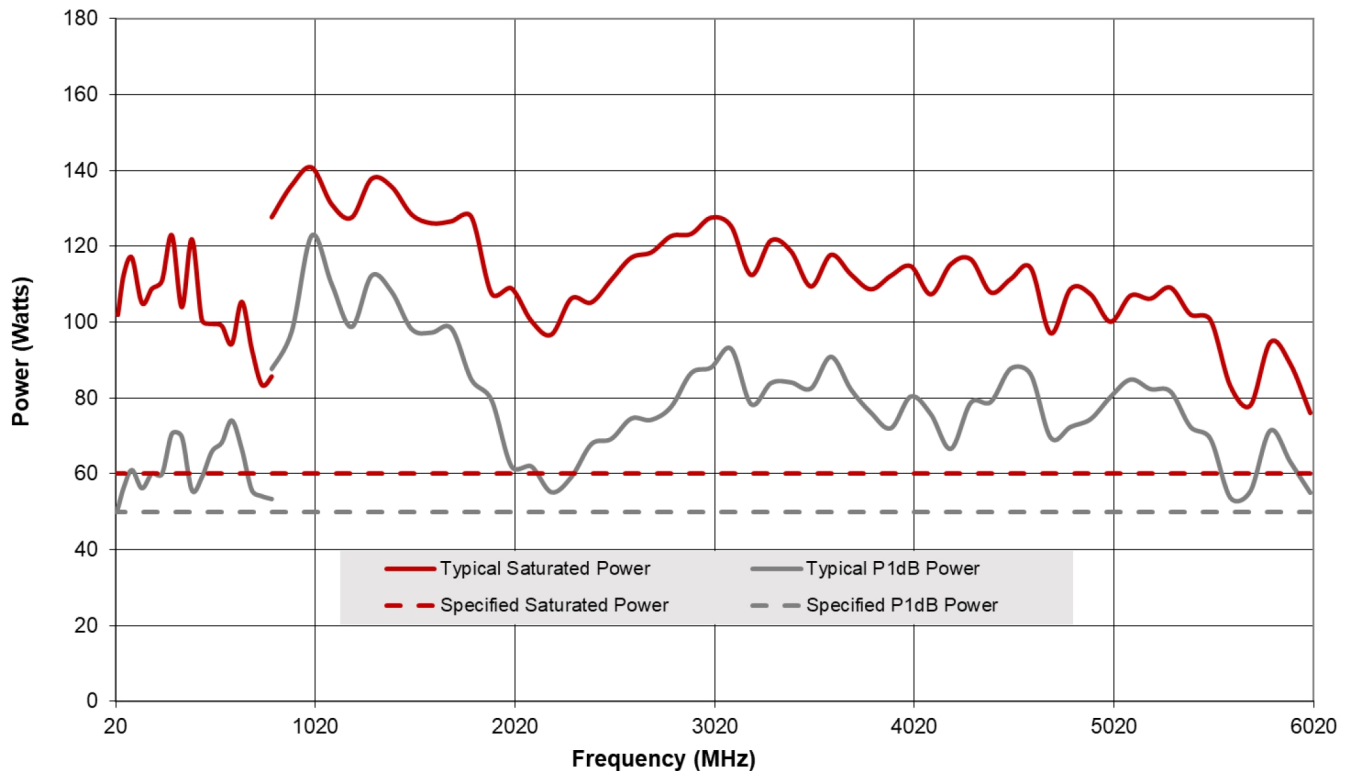


New class A, high power density, design has allowed us to produce a dual-band 50 watt P1dB, 20 MHz to 6 GHz solid-state amplifier in a compact 7U package. With a minimum of 50 watts of P1dB power this amplifier is not only ideal for RF immunity tests to standards such as ISO11452-9 but also many 5G infrastructure component tests. The touch screen colour display gives an immediate visual indication of the 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

The fan speed adjusts depending on the heatsink temperature thus ensuring the minimum audio noise level possible in the operating environment. The calibrated dual directional coupler provides a quick and easy way to monitor forward and reflected 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.



RF Specifications

Frequency Bands	Dual Band
Frequency (min.) MHz	20 MHz
Frequency (max.) GHz	6 GHz
Modulation Formats	AM, FM, PM, ODFM
RF Sample Port Coupling Factor (nom)	47 dB
Maximum Input Power (no damage)	10 dBm
Output VSWR Tolerance	Infinite any phase (no foldback)
Stability	Unconditional
Output Impedance	50 Ohm
Input VSWR	2:1 (max)
Output VSWR	2:1 (typical)
Spurious (min.)	-70 dBc

Band 1

Frequency (min.) GHz Band 1	0.02 GHz
Frequency (max.) GHz Band 1	0.8 GHz
Psat (min.) Band 1	60 W
P1dB (min.) Band 1	50 W
Gain (min.) Band 1	47 dB
Gain Variation (max) Band 1	+/- 3.0
Harmonics @ P1dB Band 1 (typ)	-18 dBc
3rd Order Intercept Point Band 1	10 db > P1dB
Noise Figure Band 1	12 dB

Band 2

Frequency (min.) Band 2	0.8 GHz
Frequency (max.) Band 2	6 GHz
Psat (min.) Band 2	60 W
P1dB (min.) Band 2	50 W
Gain (min.) Band 2	47 dB
Gain Variation (max) Band 2	+/- 3.0
Harmonics @ P1dB Band 2 (typ)	-18 dBc
3rd Order Intercept Point Band 2	10 db > P1dB
Noise Figure Band 2	12 dB

Mechanical Specifications

Safety Interlock	Via rear panel mounted BR2-female
Supply Voltage	90 to 264 VAC
Supply Frequency	47 to 63
Supply Power (typ.) Band 1	0.4 kVA
Supply Power (typ.) Band 2	0.7 kVA
RF Input Connector	Type N female
RF Output Connector	Type N female
RF Sample Port Connectors	Type N female
Com. Interface	GPIO, RS232, Ethernet & USB
Dimensions (WxHxD)	19 inch, 7U, 615mm Deep
Weight kg	40 kg
Cooling System	Air Cooled, Self-contained

Available Product Configurations

Product	Configuration	Item #
CBA20M6G-050-050D-001	Front Panel RF Connectors	3-342541
CBA20M6G-050-050D-002	Rear Panel RF Connectors	3-342542