

CBA 400M-100

1 MHz TO 400 MHz 100 WATT CLASS A BROADBAND AMPLIFIER

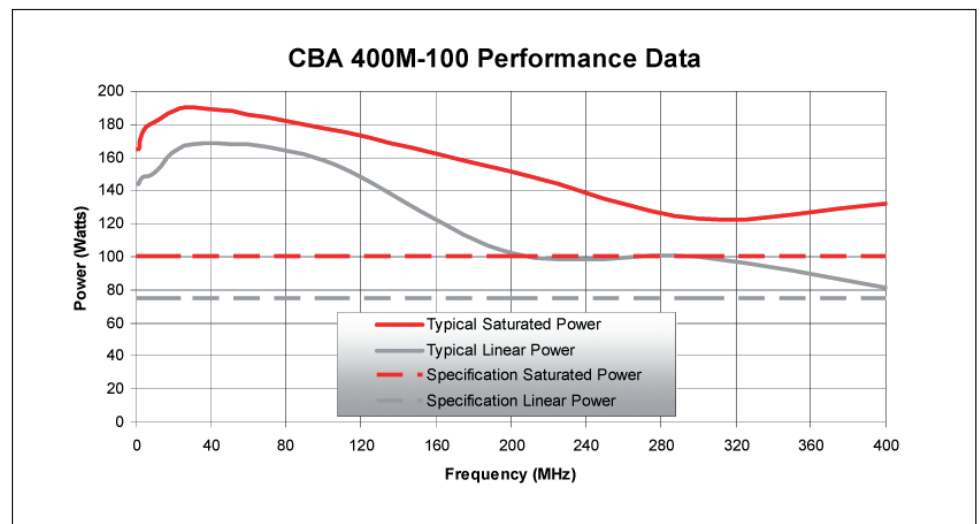


- Class A linear and low distortion design
- Ideal for BCI testing
- Mismatch tolerant and unconditionally stable
- Rugged design for EMC testing

Designed specifically for automotive, military and aerospace BCI EMC testing, this mismatch tolerant Class A amplifier delivers power continuously into the varying match typically associated with this type of testing.

The Class A design ensures a high reliability, low distortion linear performance across the frequency range. This design also ensures that the amplifier will continue to operate at full power even when presented with an open or short circuit at its output.

The unit is powered from a switched mode power supply for high efficiency, high power factor and wide voltage range operation. The unit is air-cooled with integral fans, and is protected against faulty cooling by excess temperature sensing. A safety interlock connector is provided, which the user can short circuit to ground, to put the amplifier into standby mode. Front panel indicators are provided to indicate over-temperature and rf interlock operation.





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Technical specifications

| | |
|--|---|
| Frequency range (instantaneous) | 1 to 400 MHz |
| Rated output power | 100 W minimum (>140 W typical) |
| Output power at 1 dB gain compression | 75 W minimum (>100 W typical) |
| Gain | 51 dB |
| Third order intercept point (see note 1) | 61 dBm |
| Gain variation with frequency | ±2 dB |
| Harmonics at 75 W output power | Better than -20 dBc |
| Output Impedance | 50 Ohms |
| Stability | Unconditional |
| Output VSWR tolerance (see note 2) | Infinite any phase |
| Input VSWR | 2:1 |
| RF connector style | Type N female |
| Safety interlock | BNC female, s/c to mute |
| USB interface | Optional |
| Supply voltage (single phase) | 85 to 264 Vac |
| Supply frequency range | 47 to 63 Hz |
| Supply power | <1 kVA |
| Mains connector | IEC320 |
| Conducted and radiated emissions | EN61326 Class A |
| Conducted and radiated immunity | EN61326: 1997 table 1 |
| Mains harmonic currents | EN61000-3-2 |
| Voltage fluctuations and flicker | EN61000-3-3 |
| Safety | EN61010-1 |
| Case dimensions | 19 inch, 4U case, 440 mm deep |
| Mass | 17 kg |
| Operating temperature range | 0 to 40°C |
| Options (select at time of ordering) | |
| 341-715 | Bench model with front panel mounted input/output connectors |
| 341-815 | Rack mountable with front panel mounted input/output connectors |
| 341-915 | Rack mountable with rear panel mounted input/output connectors |

Notes:

1. The third order intercept point is a nominal value, as its calculation depends upon the power level at which distortion measurements are made.
2. Output VSWR tolerance is specified for excitation within the permitted levels and frequency range.