

# AMP4066LC-1

## SOLID STATE HIGH POWER AMPLIFIER

### FEATURES

Designed for EMI/RFI, lab, CW/Pulse and all communication applications  
 Small form factor, rack mounted system  
 Class A/AB Linear design  
 High Power Advanced technology devices  
 Instantaneous ultra-wide bandwidth  
 Built-in protection circuits, with extensive monitoring  
 Local LCD & remote flexible interfaces  
 High efficiency, with unprecedented reliability and ruggedness



### ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

| Parameter                    | Specification            | Notes                       |
|------------------------------|--------------------------|-----------------------------|
| Operating Frequency Range    | 26.5 - 40.0 GHz          |                             |
| Power Output @ Psat          | 20 Watt Min              | 25-30W Typ, CW or Pulse     |
| Power Output @ P1dB          | 10 Watt Min              |                             |
| Power Gain                   | 43 dB Min                | 0dBm or less for rated Pout |
| Power Gain Flatness          | 4.0 dB p-p Max           | Constant input power        |
| Gain Adjustment Range        | 20 dB Min                | Local or remote             |
| Input Return Loss            | -10 dB Max               |                             |
| 2-Tone Intermodulation (IMD) | -30 dBc Typ              | 33dBm/Tone, Δ = 1MHz        |
| Noise Figure                 | 10 dB Typ                |                             |
| Harmonics                    | -20 dBc Max              | At rated output power       |
| Spurious                     | -60 dBc Max              | Non-harmonics               |
| Operating Voltage            | 100 - 240 VAC            | 47 - 63 Hz                  |
| Power Consumption            | 800 Watt Max             | At rated output             |
| Input Power Protection       | +10 dBm Max <sup>1</sup> |                             |
| Load VSWR Protection         | 4 : 1: Max <sup>2</sup>  | Foldback @ preset limit     |
| Sample Port (optional)       | -40 dB                   | 2.92mm K-Female             |

1 Units with optional digital monitor and control, for basic units <10 Sec without damage

2 Units with optional digital monitor and control, for basic units <1 minute at rated Pout

### ENVIRONMENTAL CHARACTERISTICS

| Parameter                     | Specification                 | Notes          |
|-------------------------------|-------------------------------|----------------|
| Operating Ambient Temperature | 0 to +50 °C                   |                |
| Storage Temperature           | -40 to +85 °C                 |                |
| Relative Humidity             | up to 95 %                    | Non-condensing |
| Altitude                      | 3000 meters                   |                |
| Shock & Vibration             | Normal transport <sup>3</sup> |                |

3 MIL Spec available for quotation

### MECHANICAL SPECIFICATIONS

| Parameter                                                                                                                     | Specification                                                                            | Notes                               |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------|
| Dimensions W x H x D                                                                                                          | 430 x 178 x 560 mm                                                                       | 4U, excluding handles               |
| Weight                                                                                                                        | 25 Kg. Nom                                                                               |                                     |
| RF Conn. In / Out / Sample (optional)                                                                                         | 2.92 mm KF/WR28/ 2.92 mm KF                                                              | Front or rear panel                 |
| Interface Connector                                                                                                           | 9-Pin D-Sub                                                                              | Rear panel                          |
| AC Power                                                                                                                      | IEC 60320-C14                                                                            | Or equivalent                       |
| Cooling: Built in Quiet-Cool                                                                                                  | Close circuit Air-liquid cooling                                                         |                                     |
| <b>OPTIONAL:</b> Digital Monitor & Control (DMC)<br>FWD, REV, VSWR, GAIN, ALC, V & I, TEMP<br>Optional Safety Interlock (INT) | Ethernet RJ-45 TCP/IP, RS422/485, USB<br>Optional GPIB Interface<br>Open=STBY/Short=RFON | IEEE rear panel<br>BNC-F rear panel |

e



# AMP4066LC-1 SOLID STATE HIGH POWER AMPLIFIER

## AVAILABLE SPECIAL OPTIONS

| Parameter                                                                      | Specification                                  | Notes                           |
|--------------------------------------------------------------------------------|------------------------------------------------|---------------------------------|
| Option FRS: Forward RF Sample                                                  | -40dB, 2.92 K-Female                           | Front or rear panel             |
| Option RRS: Reflected RF Sample                                                | -30dB, 2.92 K-Female                           | Front or rear panel             |
| Option GPIB: GPIB remote control                                               | GPIB IEEE-488 Remote capability                |                                 |
| <b>Included CPM:</b> Calibrated Power Monitoring<br>(With Option DMC purchase) | Offset correction entry for +/- 0.2dB accuracy | 15-points standard <sup>4</sup> |

<sup>4</sup> Consult with factory if additional points would be required

## OUTLINE DRAWING SHOWN WITH OPTIONAL LCD DIGITAL CONTROLLER

