

**DESCRIPTION**

This class A GaAs module is designed for both military and commercial applications. It is capable of supporting any signal type and modulation format, including but not limited to 3-4G telecom, WLAN, OFDM, DVB, and CW/AM/FM. The latest device technologies and design methods are employed to offer high power density, efficiency, and linearity in a small, lightweight package.

**FEATURES**

- Over / Under / Reverse Voltage Protection
- Forward Power Measurement
- Reflected Power Measurement
- High Speed On/Off Control
- Temperature Output
- Optional Heatsink

**APPLICATIONS**

- Military / Commercial Data links
- Telecommunications
- BTS / Repeaters / DAS
- Test and Measurement
- General Purpose Lab Use

**RF / ELECTRICAL**

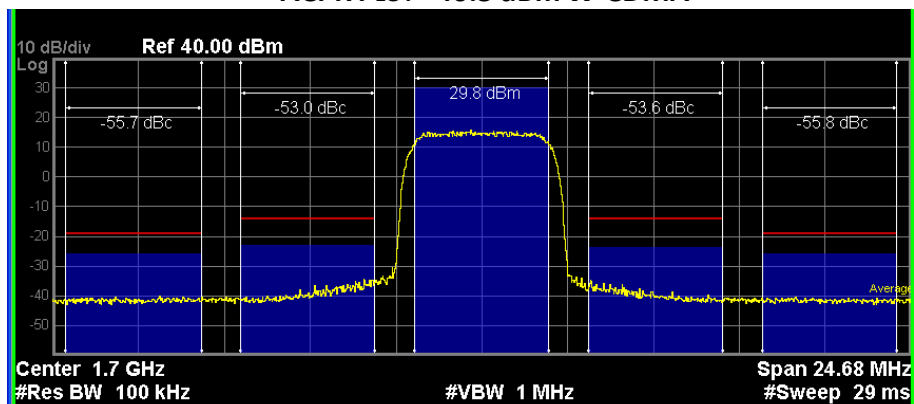
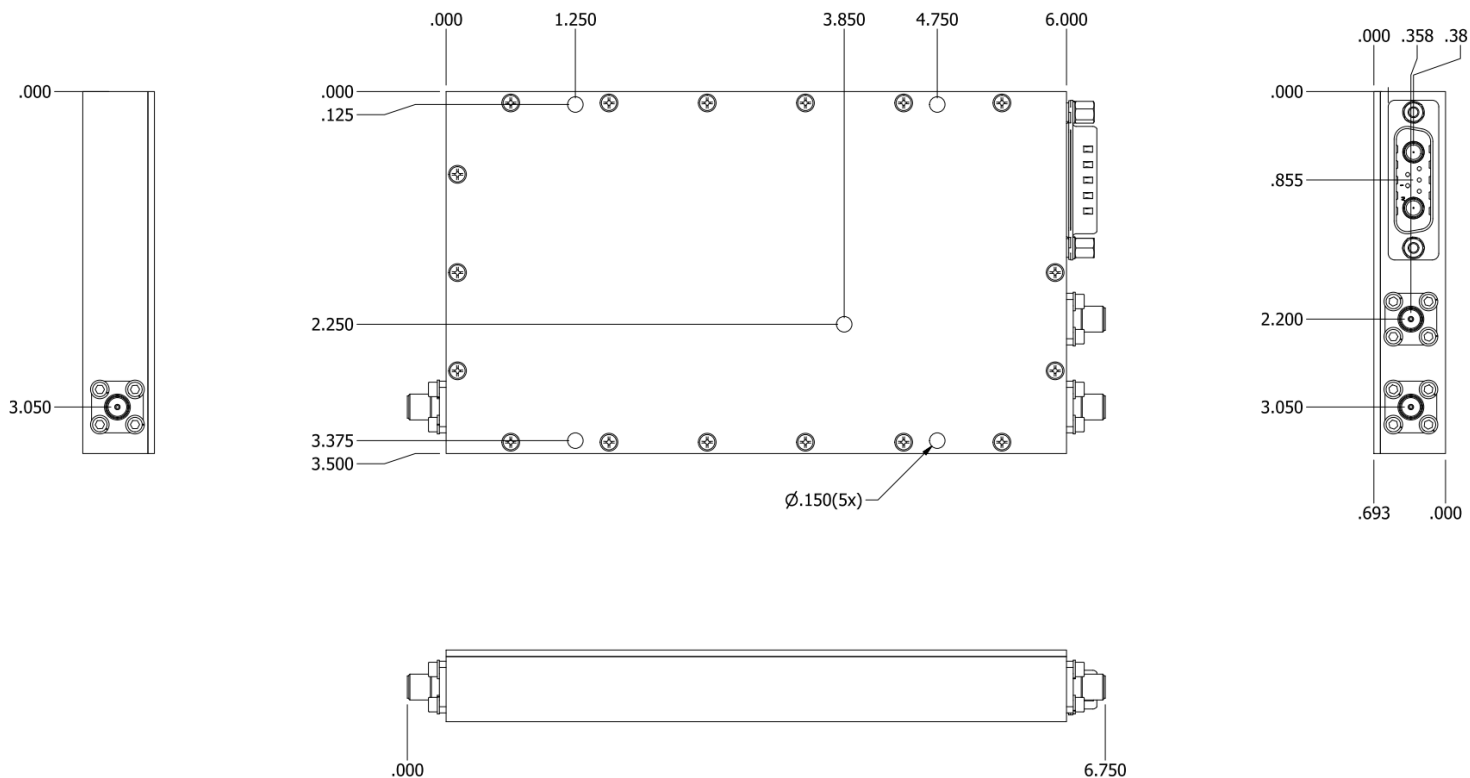
| PARAMETER                    | MIN                   | TYP  | MAX  | UNIT    |
|------------------------------|-----------------------|------|------|---------|
| Operating Frequency          | 1700                  |      | 1800 | MHz     |
| P1dB Power Output            | 47.0                  | 47.5 |      | dBm     |
| PSat Power Output            | 47.5                  | 47.5 |      | dBm     |
| Gain                         | 46.0                  | 47.0 |      | dB      |
| Gain Flatness                |                       | 0.8  | 1.2  | dB      |
| Linear Power                 |                       | 40.5 |      | dBm dBm |
| Linear Power Test Conditions | W-CDMA @ -55 dBc ACPR |      |      | --      |
| Input Return Loss            | 16                    | 18   |      | dB      |
| Operating Voltage            | 12                    |      | 14   | VDC     |
| Current Draw                 |                       | 14.0 | 15.0 | A       |
| Quiescent Current Draw       |                       | 15.0 |      | A       |
| Switching Time               |                       |      | 1.0  | uS      |

**MECHANICAL**

| PARAMETER                      | VALUE                                              | UNIT |
|--------------------------------|----------------------------------------------------|------|
| Dimensions (L x W x H)         | 6 x 3.5 x 0.693                                    | in.  |
| RF Connectors (Input / Output) | SMA-F / SMA-F                                      | --   |
| DC / Control Connector         | 7W2 Male                                           | --   |
| Cooling                        | Baseplate Conduction - Optional Heatsink Available | --   |
| Mounting                       | 4-40 Thru Holes                                    | --   |

**ENVIRONMENTAL / PROTECTIONS**

| PARAMETER                        | MIN                            | MAX  | UNIT |
|----------------------------------|--------------------------------|------|------|
| Operating Temp. (Housing Temp.)  | -40                            | +85  | °C   |
| Storage Temp Range               | -60                            | +100 | °C   |
| Humidity Range                   | 0-100                          |      | %    |
| Altitude                         | 0-30,000                       |      | ft.  |
| Shock / Vibration                | MIL-STD-810 and equivalents    |      | --   |
| Max RF Input                     | 3.5                            |      | dBm  |
| Load VSWR @ P1dB                 | Open / Short Output Protection |      | --   |
| PA Baseplate Shutoff Temperature | 85                             |      | °C   |

**ACPR PLOT - 40.5 dBm W-CDMA**

**OUTLINE DRAWING**


**DC / CONTROL PINS**

| PIN LABEL | NAME | DESCRIPTION                                     |
|-----------|------|-------------------------------------------------|
| A1        | GND  | Ground                                          |
| A2        | +VDC | Supply Voltage - Range Specified in Datasheet   |
| 1         | TEMP | Temp Monitor: Temp in DegC = (Vout - 0.5V) / 10 |
| 2         | I/O  | On / Off Control (+5V = On / 0V = Off)          |
| 3         | REV  | Reflected Power Measurement -                   |
| 4         | GND  | Detector Ground                                 |
| 5         | FWD  | Forward Power Measurement -                     |