

### FEATURES

Class AB linear LDMOS design  
Instantaneous wide bandwidth  
Suitable for all modulations standards  
Built-in monitoring and protection circuits  
High reliability and ruggedness



### ELECTRICAL SPECIFICATIONS

| Parameter                    | Specification         | Notes                              |
|------------------------------|-----------------------|------------------------------------|
| Operating Frequency Range    | 290 - 320 MHz         |                                    |
| Power Output Psat            | 30 Watt Min           | CW                                 |
| Power Gain                   | 45 dB Min             |                                    |
| Power Gain Flatness          | 2.0 dB p-p Max        |                                    |
| Input Return Loss            | 10 dB Min             | Relative to 50 Ohm                 |
| 2-Tone Intermodulation (IMD) | >30 dBc Typ           | 34dBm/Tone, $\Delta = 1\text{MHz}$ |
| Harmonics                    | >20dBc Typ            | At rated Pout                      |
| Non Harmonics Spurious       | >60 dBc               |                                    |
| Operating Voltage            | 27 - 29 VDC           |                                    |
| Current Consumption          | 4 Amp Max             | At rated Pout                      |
| Max Input Power              | +8 dBm                | Without damage                     |
| Load VSWR Protection         | $\infty : 1$ Min      |                                    |
| Turn On / Off Speed          | 5 $\mu\text{Sec}$ Max |                                    |

### ENVIRONMENTAL CHARACTERISTICS

| Parameter                  | Specification | Notes            |
|----------------------------|---------------|------------------|
| Operating Case Temperature | -20 to +75 °C |                  |
| Storage Temperature        | -40 to +85 °C |                  |
| Relative Humidity          | 5 to 95 %     | Non Condensation |

### MECHANICAL SPECIFICATIONS

| Parameter                      | Specification     | Notes                |
|--------------------------------|-------------------|----------------------|
| Dimensions                     | 140 X 80 X 24 mm  | Excluding Connectors |
| Weight                         | 400 gr.           | Typical Weight       |
| RF Connectors In/Out           | SMA female        |                      |
| DC Power / Interface Connector | 9-Pin D-Sub       |                      |
| Cooling                        | External Heatsink | Forced air required  |

### D-SUB CONNECTOR PIN ASSIGNMENT

| Pin  | Function       | Description                                           |
|------|----------------|-------------------------------------------------------|
| 1    | FWD            | N/C                                                   |
| 2    | VVA            | N/C                                                   |
| 3    | CURRENT SENSOR | $I_D @ 50\text{mV}/100\text{mA}$ Typ                  |
| 4    | TEMP SENSOR    | $V_T @ 10\text{mV}/^\circ\text{C} + 500\text{mV}$ Typ |
| 5    | SHUTDOWN       | TTL                                                   |
| 6, 7 | VDD            | 28VDC                                                 |
| 8, 9 | GND            | Ground                                                |

**OUTLINE DRAWING**

