



HD30363 SOLID STATE HIGH POWER AMPLIFIER

PRELIMINARY

FEATURES

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

ELECTRICAL SPECIFICATIONS

| Parameter | Specification | Notes |
|---------------------------------|-----------------|------------------------|
| Operating Frequency Range | 2000 - 6000 MHz | |
| Power Output Psat | 80 Watt Min | CW |
| Power Output @ P1dB | TBD Watt | CW |
| Power Gain | 47 dB Min | |
| Power Gain Flatness | 4.0 dB p-p Max | Constant input power |
| Gain Variation Over Temperature | ±2.0 dB Max | Rated case temperature |
| Input / Output Return Loss | 10 dB Min | Relative to 50 Ohm |
| 2-Tone Intermodulation (IMD) | >30 dBc Typ | 39 dBm/Tone, Δ = 1 MHz |
| Harmonics | >20 dBc Typ | At rated Pout |
| Non Harmonics Spurious | >60 dBc | |
| Operating Voltage | 48 VDC ± 0.5 V | |
| Current Consumption | 12 Amp Typ | At rated Pout |
| Max Input Power | +8 dBm | Without damage |
| Load VSWR Protection | ∞ : 1 | |
| Turn On / Off Speed | 5 μSec 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 Condensing |

MECHANICAL SPECIFICATIONS

| Parameter | Specification | Notes |
|--------------------------------|---------------------|----------------------|
| Dimensions | 370x200x27 mm | Excluding Connectors |
| Weight | TBD Kg. | |
| RF Connectors In/Out | Hi Freq. SMA female | |
| DC Power / Interface Connector | 9-Pin D-Sub | |
| Cooling | External Heatsink | Forced air required |



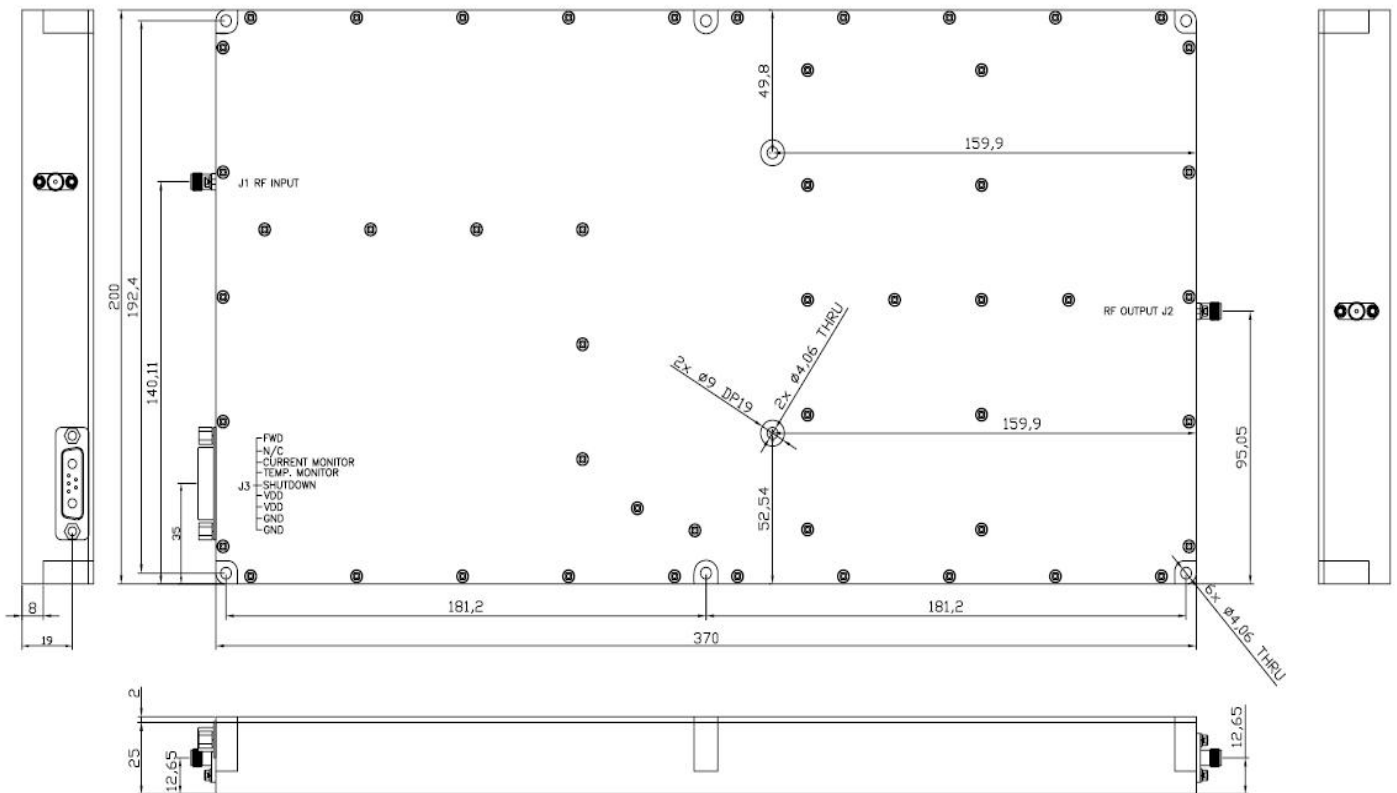
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PRELIMINARY

D-SUB CONNECTOR PIN ASSIGNMENT

| Pin | Function | Description |
|------|----------------|--|
| 1 | FWD | OPTION 101 - Forward power detect |
| 2 | VVA | OPTION 103 - Variable Voltage Attenuator |
| 3 | CURRENT SENSOR | $I_D @ 20mV/100mA$ Typ |
| 4 | TEMP SENSOR | $V_T @ 10mV/^\circ C + 500mV$ Typ |
| 5 | SHUTDOWN | TTL |
| 6, 7 | VDD | 48VDC |
| 8, 9 | GND | Ground |

OUTLINE DRAWING - OPTION 101



OPTION ORDERING INFORMATION:

| OPTION | Function | Description |
|--------|----------|-----------------------------|
| 101 | FWD | Forward power detect |
| 103 | VVA | Variable Voltage Attenuator |