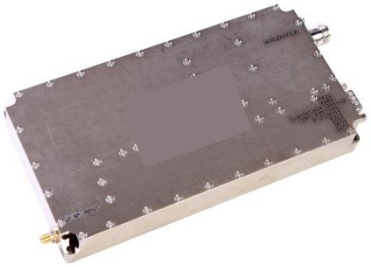
# HD32871
# SOLID STATE HIGH POWER AMPLIFIER

**FEATURES**

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



**ELECTRICAL SPECIFICATIONS**: 50Ω, 25°

| Parameter | Specification | Notes |
|---|---|---|
| Operating Frequency Range | 1 - 32 MHz Min | |
| Power Output @ Psat | 200 Watt Min | CW |
| Power Gain | 20 - 30 dB Min | |
| Power Gain Flatness | 2.0 dB p-p Max | |
| Input Return Loss | -10 dB Max | Relative to 50 Ohm |
| 2-Tone Intermodulation (IMD) | <-30 dBc Typ | 43dBm/Tone, Δ = 1MHz |
| Harmonics | $2^{nd}$ <-20dBc, $3^{rd}$ <-12dBc Typ | At rated Pout |
| Spurious | -60 dBc Max | Non-harmonics |
| Operating Voltage | 32 VDC Nom | |
| Current Consumption | 14 Amp Max | At rated Pout |
| Input Power Protection | +33 dBm Max | |
| Load VSWR Protection | ∞ : 1 | <1 minute at rated Pout |
| 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 | 162 x 106 x 28 mm | Excluding connectors |
| Weight | 700 gr. | |
| RF Connectors In/Out | SMA-F / Type-N | |
| DC Power / Interface Connector | 7-Pin Hybrid D-Sub | |
| Cooling | External Heatsink | Forced air required |

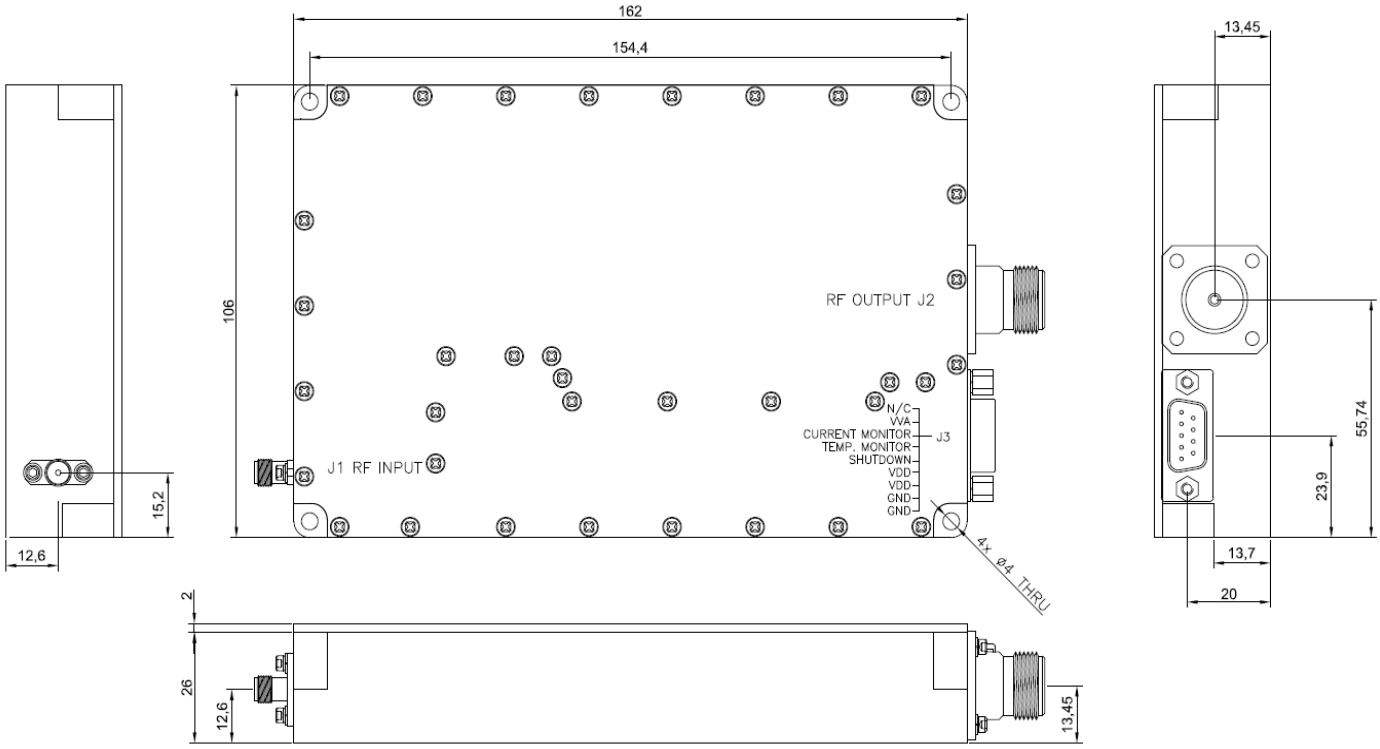
**D-SUB CONNECTOR PIN ASSIGNMENT**

| Pin | Function | Description |
|---|---|---|
| 1 | FWD | N/A |
| 2 | VVA | N/A |
| 3 | CURRENT SENSOR | $I_D$@20mV/100mA Typ |
| 4 | TEMP SENSOR | $V_T$@10mV/°C + 500mV Typ |
| 5 | SHUTDOWN | TTL |
| A1 | VDD | 32VDC |
| A2 | GND | Ground |

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**OUTLINE DRAWING**




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