# HD31098
# SOLID STATE HIGH POWER AMPLIFIER

**FEATURES**

X-Band Solid-State High Power Booster Module
Class AB linear GaN design
Suitable for all modulations standards
Built-in protection circuits
High reliability and ruggedness

**ELECTRICAL SPECIFICATIONS**

| Parameter | Specification | Notes |
|---|---|---|
| Operating Frequency Range | 10 GHz ± 0.2 GHz | |
| Power Output Psat | 40 Watt Min | CW |
| Power Gain | 12 dB Min | |
| Input Return Loss | 10 dB Min | Relative to 50 Ohm |
| Harmonics | >30 dBc Typ | At rated Pout |
| Spurious | >60 dBc | Non Harmonics |
| Operating Voltage | 32 VDC Nom | |
| Current Consumption | 8.5 Amp Max | At rated Pout |
| Load VSWR Protection | 10 : 1 | O/P Isolator |

**ENVIRONMENTAL CHARACTERISTICS**

| Parameter | Specification | Notes |
|---|---|---|
| Operating Case Temperature | -20 to +65 °C | |
| Storage Temperature | -40 to +85 °C | |
| Relative Humidity | 5 to 95 % | Non Condensation |

**MECHANICAL SPECIFICATIONS**

| Parameter | Specification | Notes |
|---|---|---|
| Dimensions | 140 x 130 x27 mm | Excluding Connectors |
| Weight | | |
| RF Connectors In/Out | SMA-F | |
| DC Power / Interface Connector | Hybrid D-Sub | |
| Cooling | External Heatsink | Forced air required |

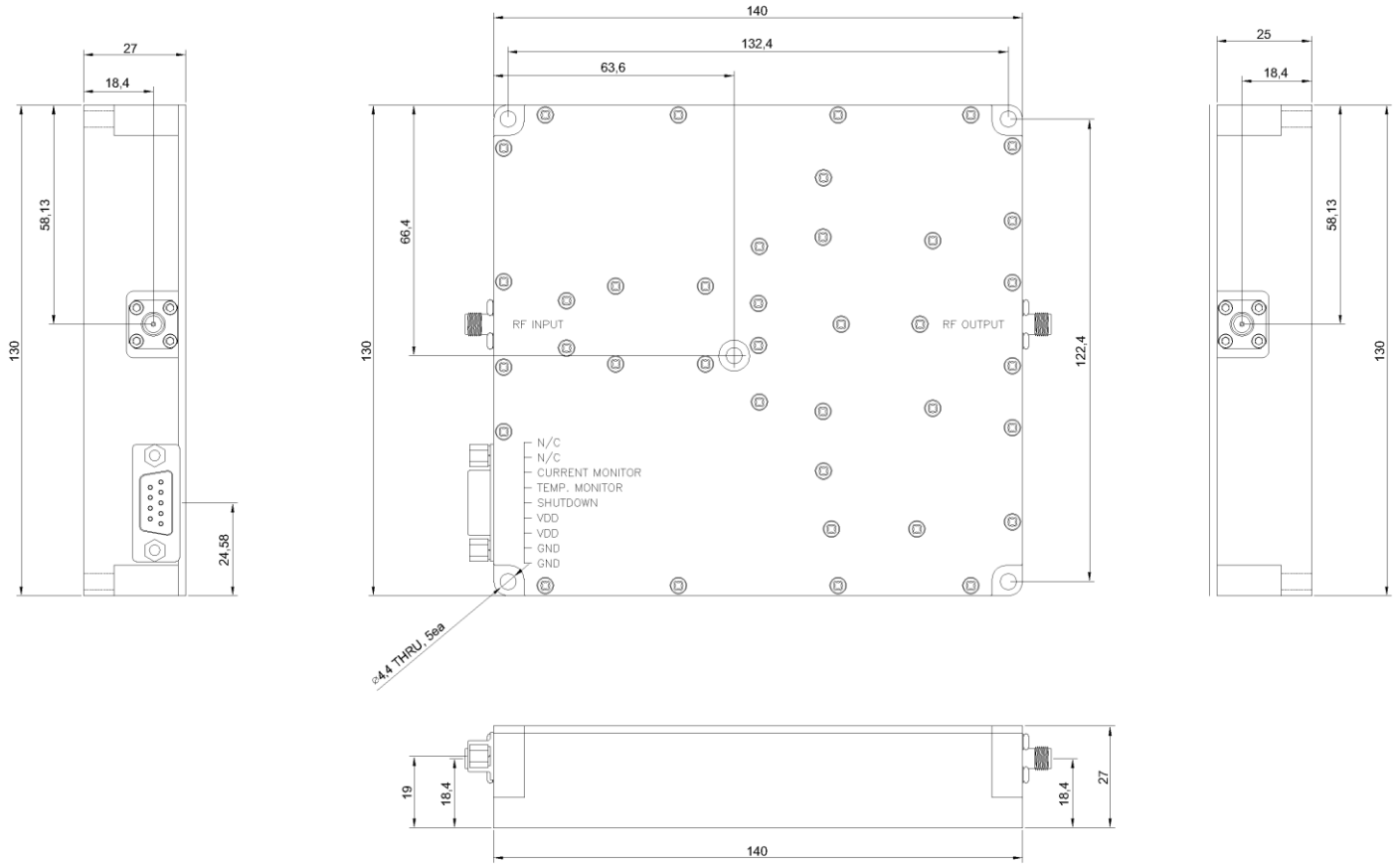
**D-SUB CONNECTOR PIN ASSIGNMENT**

| Pin | Function | Description |
|---|---|---|
| 1 | FWD | N/C |
| 2 | REV | N/C |
| 3 | CURRENT NONITOR | $I_D$ @ 20mV/100mA Typ |
| 4 | TEMP SENSOR | $V_T$ @ 10mV/°C + 500mV Typ |
| 5 | SHUTDOWN | TTL |
| 6, 7 | VDD | 32VDC |
| 8, 9 | GND | Ground |

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**OUTLINE DRAWING**




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