

# AMP3118

## SOLID STATE HIGH POWER AMPLIFIER

### FEATURES

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



### ELECTRICAL SPECIFICATIONS

| Parameter                  | Specification   | Notes                |
|----------------------------|-----------------|----------------------|
| Operating Frequency Range  | 32.0 - 36.0 GHz |                      |
| Power Output Psat          | 5 Watt Min      |                      |
| Power Gain                 | 37 dB Min       |                      |
| Power Gain Flatness        | 3.0 dB p-p Max  | Constant input power |
| Input / Output Return Loss | 10 dB Min       | Relative to 50 Ohm   |
| Harmonics                  | >20 dBc         | At rated Pout        |
| Non Harmonics Spurious     | >60 dBc Min     |                      |
| Operating Voltage          | 9 VDC Nom       |                      |
| Current Consumption        | 9 Amp Typ       | At rated Pout        |
| Max Input Power            | +3 dBm          | Without damage       |
| Load VSWR Protection       | 5 : 1           |                      |

### 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                     | 100 X 100 X 27 mm | Excluding Connectors |
| Weight                         | 600 gr.           |                      |
| RF Connectors In/Out           | SMA K Type female |                      |
| DC Power / Interface Connector | 9-Pin D-Sub       |                      |
| Cooling                        | External Heatsink | Forced air required  |

### D-SUB CONNECTOR PIN ASSIGNMENT

| Pin | Function       | Description                         |
|-----|----------------|-------------------------------------|
| 1   | N/C            | Reserved                            |
| 2   | N/C            | Reserved                            |
| 3   | CURRENT SENSOR | I <sub>D</sub> @20mV/100mA Typ      |
| 4   | TEMP SENSOR    | V <sub>T</sub> @10mV/°C + 500mV Typ |
| 5   | SHUTDOWN       | TTL                                 |
| 6,7 | VDD            | 9VDC                                |
| 8,9 | GND            | Ground                              |

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## OUTLINE DRAWING

