



## AMP5028 SOLID STATE HIGH POWER AMPLIFIER

### FEATURES

Class AB linear GaAsFET hybrid chip & wire design  
Instantaneous bandwidth  
Suitable for all modulations standards  
Built-in protection circuits  
High reliability and ruggedness

### ELECTRICAL SPECIFICATIONS

| Parameter                  | Specification       | Notes                |
|----------------------------|---------------------|----------------------|
| Operating Frequency Range  | 33.3 - 33.9 GHz     |                      |
| Power Output               | 2.0 Watt Min        |                      |
| Power Gain                 | 33 dB Min           |                      |
| Power Gain Flatness        | 1.5 dB p-p Max      | Constant input power |
| Input / Output Return Loss | 10 dB Min           | Relative to 50 Ohm   |
| Harmonics                  | >20 dBc Typ         | At rated Pout        |
| Non Harmonics Spurious     | >60 dBc Min         |                      |
| Operating Voltage          | 8.0 VDC $\pm$ 0.5 V |                      |
| Current Consumption        | 8.0 Amp Max         | At rated Pout        |
| Max Input Power            | +5 dBm              | Without damage       |
| Load VSWR Protection       | 5 : 1               |                      |

### ENVIRONMENTAL CHARACTERISTICS

| Parameter                  | Specification | Notes            |
|----------------------------|---------------|------------------|
| Operating Case Temperature | -20 to +60 °C |                  |
| Storage Temperature        | -40 to +85 °C |                  |
| Relative Humidity          | 5 to 95 %     | Non Condensation |

### MECHANICAL SPECIFICATIONS

| Parameter                      | Specification      | Notes                |
|--------------------------------|--------------------|----------------------|
| Dimensions                     | 210 X 170 X 40 mm  | Excluding Connectors |
| Weight                         | TBD                |                      |
| RF Connectors In/Out           | K Type female/WR28 |                      |
| 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/C                                 |
| 2   | REV             | N/C                                 |
| 3   | CURRENT MONITOR | I <sub>D</sub> @20mV/100mA Typ      |
| 4   | TEMP SENSOR     | V <sub>T</sub> @10mV/°C + 500mV Typ |
| 5   | SHUTDOWN        | TTL                                 |
| A1  | VDD             | 8.0VDC                              |
| A2  | GND             | Ground                              |

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## OUTLINE DRAWING

