

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









# JTDB25

### 25 Watts, 36 Volts, Pulsed Avionics, 960-1215 MHz

| GENERAL DESCRIPTION  The JTDB25 is a high power COMMON designed for pulsed systems in the frequency has gold thin-film metallization and diffuse MTTF. The transistor includes input and capability. Low thermal resistance package extends life. | CASE OUTLINE<br>55AW-1 |   |  |
|---|------------------------|---|--|
| ABSOLUTE MAXIMUM RATINGS  | S                      |   |  |
| Maximum Power Dissipation @ 25°C <sup>1</sup>   | 97W                    |   |  |
| Maximum Voltage and Current   |                        |   |  |
| $\mathrm{BV}_{\mathrm{CES}}$  | 55V                    |   |  |
| $\mathrm{BV}_{\mathrm{EBO}}$  | 3.5V                   |   |  |
| $I_{C}$   | 5.0A                   | _ |  |
| Maximum Temperatures  |                        |   |  |
| Storage Temperature   | -65 to +200°C          |   |  |
| Operating Junction Temperature  | +200°C                 |   |  |

#### **ELECTRICAL CHARACTERISTICS @ 25°C**

| SYMBOL                | CHARACTERISTICS               | TEST CONDITIONS                            | MIN | TYP | MAX | UNITS |
|-----------------------|-------------------------------|--|-----|-----|-----|-------|
| $BV_{EBO}$            | Emitter – Base Breakdown      | $I_E = 5 \text{ mA}$                       | 3.5 |     |     | V     |
| BV <sub>CES</sub>     | Collector – Emitter Breakdown | $I_C = 10 \text{ mA}$                      | 55  |     |     | V     |
| $h_{FE}$              | DC – Current Gain             | $I_C = 500 \text{mA}, V_{CE} = 5 \text{V}$ | 20  |     |     |       |
| $\theta_{ m JC}^{-1}$ | Thermal Resistance            |  |     |     | 1.8 | °C/W  |
|                       |                               |  |     |     |     |       |

### **FUNCTIONAL CHARACTERISTICS @ 25°C**

| Pout              | Power Output            | F=960-1215 MHz     | 25  |     |     | W  |
|-------------------|-------------------------|--------------------|-----|-----|-----|----|
| Pin               | Power Input             | Vcc = 36V          |     |     | 5   | W  |
| Gain              | Power Gain              | Pulse width = 10μs | 7.0 | 7.5 |     |    |
| RL                | Return Loss             | DF=40%             | 8   |     |     | dB |
| VSWR <sup>2</sup> | Load Mismatch Tolerance | F = 1090 MHz       |     |     | 5:1 |    |

NOTES: 1. At Rated Pulse Conditions 2. At Rated Output Power

Rev A: Dec 2009



