



JTDB25

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

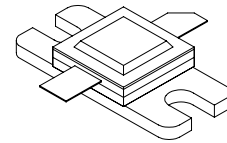
GENERAL DESCRIPTION

The JTDB25 is a high power COMMON BASE bipolar transistor. It is designed for pulsed systems in the frequency band 960-1215 MHz. The device has gold thin-film metallization and diffused ballasting for proven highest MTTF. The transistor includes input and output prematch for broadband capability. Low thermal resistance package reduces junction temperature, extends life.

CASE OUTLINE 55AW-1

ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C ¹	97W
Maximum Voltage and Current	
BV _{CES}	55V
BV _{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 mA	3.5			V
BV _{CES}	Collector – Emitter Breakdown	I _C = 10 mA	55			V
h _{FE}	DC – Current Gain	I _C = 500mA, V _{CE} = 5V	20			
θ _{JC} ¹	Thermal Resistance				1.8	°C/W

FUNCTIONAL CHARACTERISTICS @ 25°C

Pout	Power Output	F=960-1215 MHz	25			W
Pin	Power Input	V _{cc} = 36V			5	W
Gain	Power Gain	Pulse width = 10μs	7.0	7.5		
RL	Return Loss	DF=40%	8			dB
VSWR ²	Load Mismatch Tolerance	F = 1090 MHz			5:1	

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

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