

DMEG 250

250 Watts, 50 Volts, Pulsed
Avionics 960 - 1215 MHz

GENERAL DESCRIPTION

The DMEG 250 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 for proven highest MTTF. The transistor includes input and output prematch for broadband capability. Low thermal resistance package reduces junction temperature, extends life.

ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C² 875 Watts

Maximum Voltage and Current

BVces Collector to Base Voltage 55 Volts

BVebo Emitter to Base Voltage 4.0 Volts

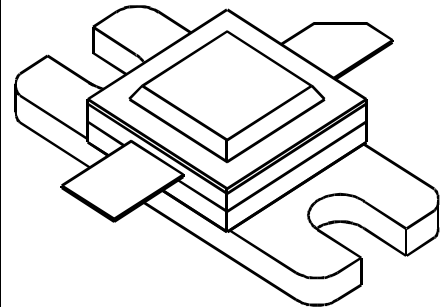
Ic Collector Current 30 Amps

Maximum Temperatures

Storage Temperature - 65 to + 200°C

Operating Junction Temperature + 200°C

CASE OUTLINE 55AW, STYLE 1



ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Out	F = 960-1215 MHz	250			Watts
Pin	Power Input	Vcc = 50 Volts			60	Watts
Pg	Power Gain	PW = 10 µsec	6.2			dB
η_c	Collector Efficiency	DF = 5%		35		%
VSWR	Load Mismatch Tolerance	F = 1090 MHz			5:1	

BVebo	Emitter to Base Breakdown	Ie = 20 mA	4.0			Volts
BVces	Collector to Emitter Breakdown	Ic = 25 mA	55			Volts
Cob	Capacitance Collector to Base	Vcb = 50 Volts				pF
h_{FE}	DC - Current Gain	Ic = 1 mA, Vce = 5 V	10			
θjc²	Thermal Resistance				0.2	°C/W

Note 1: At rated output power and pulse conditions

2: At rated pulse conditions

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GHz Technology Inc. 3000 Oakmead Village Drive, Santa Clara, CA 95051-0808 Tel. 408 / 986-8031 Fax 408 / 986-8120