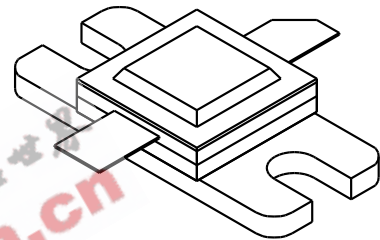


GENERAL DESCRIPTION

The 2021-25 is a COMMON BASE transistor capable of providing 25 Watts, Class C output power over the band 2000-2130 MHz. The transistor includes input and output prematching for full Broadband capability. Gold metalization and diffused ballasting are used to provide high reliability and supreme ruggedness. The transistor uses a fully hermetic High Temperature Solder Sealed package.

CASE OUTLINE 55AW, STYLE 1



ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C 58 Watts

Maximum Voltage and Current

BVces	Collector to Emitter Voltage	40 Volts
BVebo	Emitter to Base Voltage	3.5 Volts
Ic	Collector Current	3.0 Amps

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
Pout	Power Out	F = 2000-2100 MHz	25			Watts
Pin	Power Input	Vcc = 24 Volts			5.0	Watts
Pg	Power Gain		7.0			dB
ηc	Efficiency			50		%
VSWR1	Load Mismatch Tolerance	Pout = 25 Watts			3:1	

BVces	Collector to Base Breakdown	Ic = 10 mA	40			Volts
BVebo	Emitter to Base Breakdown	Ie = 5 mA	3.5			Volts
Hfe	Current Gain	Vce = 5V, Ic=1 A	20		120	
Cob	Output Capacitance*					pF
θjc	Thermal Resistance	Tc = 25°C			3.0	°C/W

* Not measurable due to internal prematch network

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