

1720 - 20

20 Watt - 28 Volts, Class C
Microwave 1700 - 2000 MHz

GENERAL DESCRIPTION

The 1720-20 is a COMMON BASE transistor capable of providing 20 Watts of Class C, RF output power over the band 1700-2000 MHz. This transistor is designed for Microwave Broadband Class C amplifier applications. It includes Input and Output prematching and utilizes Gold metalization and diffused ballasting to provide high reliability and supreme ruggedness. The transistor uses a fully hermetic High Temperature Solder sealed package.

ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C 67 Watts

Maximum Voltage and Current

BVces Collector to Emitter Voltage 50 Volts

BVebo Emitter to Base Voltage 3.5 Volts

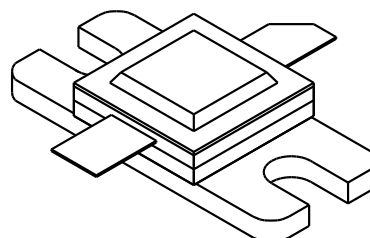
Ic Collector Current 6.0 A

Maximum Temperatures

Storage Temperature - 65 to + 200°C

Operating Junction Temperature + 200°C

CASE OUTLINE 55AW, STYLE1



ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Out	F = 2.0 GHz	20			Watt
Pin	Power Input	Vcb = 28 Volts			5.0	Watt
Pg	Power Gain	Pin = 5.0 Watts	6.0	6.5		dB
η_c	Collector Efficiency	As Above		32		%
VSWR ₁	Load Mismatch Tolerance	F = 2.0 GHz, Pin = 5.0			10:1	

BVces	Collector to Emitter Breakdown	Ic = 10 mA	50			Volts
BVcbo	Collector to Base Breakdown	Ic = 10 mA				Volts
BVebo	Emitter to Base Breakdown	Ie = 1.0 mA	3.5			Volts
Icbo	Collector to Base Current	Vcb = 28 Volts			4.0	μA
h _{FE}	Current Gain	Vce = 5 V, Ic = 1.2 A	10			
Cob	Output Capacitance	F = 1 MHz, Vcb = 28 V			2.6	pF
θjc	Thermal Resistance					°C/W

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