

1720 - 5A

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

GENERAL DESCRIPTION

The 1720-5A is a COMMON BASE transistor capable of providing 5 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 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 21 Watts

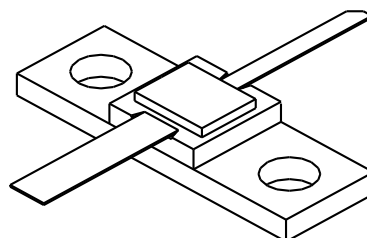
Maximum Voltage and Current

BVces	Collector to Emitter Voltage	50 Volts
BVebo	Emitter to Base Voltage	3.5 Volts
Ic	Collector Current	1.0 Amps

Maximum Temperatures

Storage Temperature	- 65 to + 200°C
Operating Junction Temperature	+ 200°C

CASE OUTLINE 55LV, STYLE 1



ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
P_{out}	Power Out	F = 2.0 GHz	5.0			Watt
P_{in}	Power Input	V _{cb} = 28 Volts			1.12	Watt
P_g	Power Gain	P _{in} = 1.12 Watts	6.0	6.5		dB
η_c	Collector Efficiency	As Above		35		%
VSWR₁	Load Mismatch Tolerance	F = 2.0 GHz, P _{in} = 1.12			3:1	

BVces	Collector to Emitter Breakdown	I _c = 40 mA	50			Volts
BVebo	Emitter to Base Breakdown	I _e = 0.5 mA	3.5			Volts
H_{FE}	Current Gain	V _{ce} = 5 V, I _c = 200 mA	10			
C_{ob}	Output Capacitance	F = 1.0 MHz, V _{cb} = 28 V		8.0		pF
θ_{jc}	Thermal Resistance				8.0	°C/W

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