GHz TECHNOLOGY
RF·MICROWAVE SILICON POWER TRANSISTORS

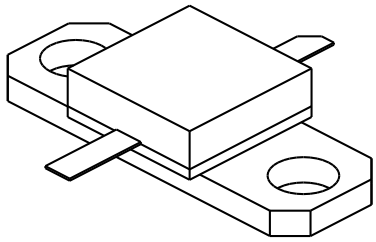
1720 - 2

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

GENERAL DESCRIPTION

The 1720-2 is a COMMON BASE transistor capable of providing 2 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 reliagility and supreme ruggedness.

CASE OUTLINE
55LT, STYLE 1



ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C 11.6 Watts

Maximum Voltage and Current

BVces	Collector to Emitter Voltage	50 Volts
BVebo	Emitter to Base Voltage	3.5 Volts
Ic	Collector Current	0.5 Amps

Maximum Temperatures

Storage Temperature	- 65 to +150°C
Operating Junction Temperature	+200°C

ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Out	F = 2.0 GHz	2.0			Watt
Pin	Power Input	Vcb = 28 Volts			0.35	Watt
Pg	Power Gain	Pin =.35 Watts	7.5			dB
η_c	Collector Efficiency	As Above		35		%
$VSWR_1$	Load Mismatch Tolerance	F = 2.0GHz, Pin = .35			10:1	

BVces	Collector to Emitter Breakdown	Ic = 20 mA	50			Volts
BVebo	Emitter to Base Breakdown	Ie = 0.25 mA	3.5			Volts
H_{FE}	Current Gain	Vce = 5 V, Ic = 100 mA	10			mA
Cob	Output Capacitance	F =1.0 MHz, Vcb = 28 V		4.5		pF
θ_{jc}	Thermal Resistance				15	°C/W

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