GHz TECHNOLOGY
RF·MICROWAVE SILICON POWER TRANSISTORS

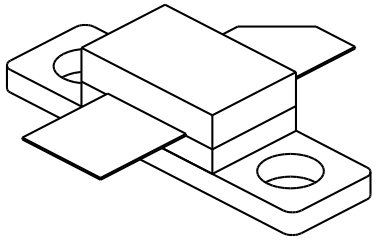
1819AB25

25 Watts, 25 Volts, Class AB
Personal 1808 - 1880 MHz

GENERAL DESCRIPTION

The 1819AB25 is a COMMON EMITTER transistor capable of providing 25 Watts of Class AB, RF output power over the band 1808-1880 MHz. This transistor is specifically designed for **PERSONAL COMMUNICATIONS BASE STATION** amplifier applications. It includes Input prematching and utilizes Gold metalization and HIGH VALUE EMITTER ballasting to provide high reliability and supreme ruggedness. .

CASE OUTLINE
55CT, STYLE 2
COMMON EMITTER



ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25ºC 87 Watts

Maximum Voltage and Current

BVces	Collector to Emitter Voltage	60Volts
BVebo	Emitter to Base Voltage	3.5 Volts
Ic	Collector Current	10.0 Amps

Maximum Temperatures

Storage Temperature	- 65 to + 150ºC
Operating Junction Temperature	+ 200ºC

ELECTRICAL CHARACTERISTICS @ 25 ºC

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Out	F =1880 MHz	25			Watt
Pin	Power Input	Vce = 25 Volts			5.0	Watt
Pg	Power Gain	Icq = 0.27 Amps	7.0	7.5		dB
η_c	Collector Efficiency	As Above		43		%
$VSWR_1$	Load Mismatch Tolerance				3:1	

BVces	Collector to Emitter Breakdown	Ic = 50 mA	60			Volts
BVebo	Emitter to Base Breakdown	Ie = 10 mA	3.5			Volts
Ices	Collector Leakage Current	Vce = 27 Volts			10	mA
h_{FE}	DC - Current Gain	Vce = 5 V, Ic = 0.7 A	20		100	
Cob	Output Capacitance	F =1 MHz, Vcb = 28 V		28		pF
θ_{jc}	Thermal Resistance	Tc = 25ºC			2.0	ºC/W

Initial Issue February 1995

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