

1819AB4

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

GENERAL DESCRIPTION

The 1819AB4 is a COMMON EMITTER transistor capable of providing 4 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. .

ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C 20 Watts

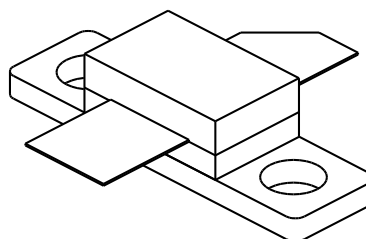
Maximum Voltage and Current

BVces	Collector to Emitter Voltage	60Volts
BVebo	Emitter to Base Voltage	3.5 Volts
Ic	Collector Current	1.5 Amps

Maximum Temperatures

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

CASE OUTLINE 55CT, STYLE 2 COMMON EMITTER



ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
P_{out}	Power Out	F =1880 MHz	3.2			Watt
P_{in}	Power Input	Vce = 25 Volts			.38	Watt
P_g	Power Gain	Ic _q = 0.100 Amps	9.3	10.0		dB
η_c	Collector Efficiency	As Above		43		%
VSWR₁	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			1.0	mA
h_{FE}	DC - Current Gain	Vce = 5 V, Ic = 0.100 A	20		100	
Cob	Output Capacitance	F =1 MHz, Vcb = 28 V		5.5		pF
θjc	Thermal Resistance	Tc = 25°C			6.0	°C/W

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