GHz TECHNOLOGY
RF·MICROWAVE SILICON POWER TRANSISTORS

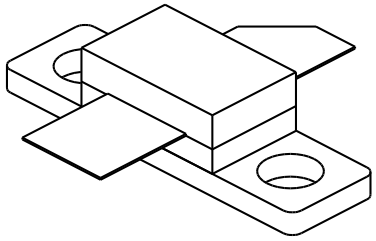
1819AB12

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

GENERAL DESCRIPTION

The 1819AB12 is a COMMON EMITTER transistor capable of providing 12 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	30 Watts
Maximum Voltage and Current	
BVces Collector to Emitter Voltage	60Volts
BVebo Emitter to Base Voltage	3.5 Volts
Ic Collector Current	3.5 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	12			Watt
Pin	Power Input	Vce = 25 Volts			2.2	Watt
Pg	Power Gain	Icq = 0.13 Amps	7.5	8.0		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			3	mA
h_{FE}	DC - Current Gain	Vce = 5 V, Ic = 0.5 A	20		100	
Cob	Output Capacitance	F =1 MHz, Vcb = 28 V		12		pF
θ_{jc}	Thermal Resistance	Tc = 25ºC			3.8	ºC/W

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