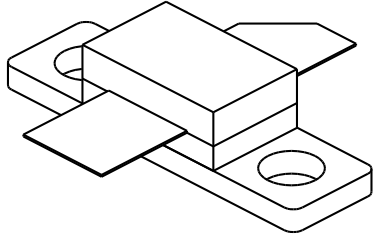


1819AB12

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

<p>GENERAL DESCRIPTION</p> <p>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. .</p>	<p>CASE OUTLINE 55CT, STYLE 2 COMMON EMITTER</p> 
<p>ABSOLUTE MAXIMUM RATINGS</p> <p>Maximum Power Dissipation @ 25°C 30 Watts</p> <p>Maximum Voltage and Current</p> <p>BVces Collector to Emitter Voltage 60Volts BVebo Emitter to Base Voltage 3.5 Volts Ic Collector Current 3.5 Amps</p> <p>Maximum Temperatures</p> <p>Storage Temperature - 65 to + 150°C Operating Junction Temperature + 200°C</p>	

ELECTRICAL CHARACTERISTICS @ 25 °C

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		%
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			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 = 25°C			3.8	°C/W

Initial Issue February 1995

GHz TECHNOLOGY INC. RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE. GHz RECOMMENDS THAT BEFORE THE PRODUCT(S) DESCRIBED HEREIN ARE WRITTEN INTO SPECIFICATIONS, OR USED IN CRITICAL APPLICATIONS, THAT THE PERFORMANCE CHARACTERISTICS BE VERIFIED BY CONTACTING THE FACTORY.