

1617AB5

5 Watts PEP, 26 Volts, Class AB
Linear 1600 - 1700 MHz

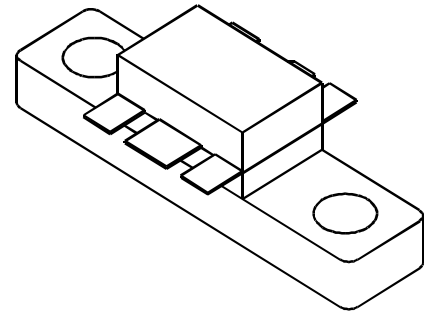
GENERAL DESCRIPTION

The 1617AB5 is a COMMON EMITTER transistor capable of providing 5 Watts PEP of Class AB, RF output power over the band 1626- 1660 MHz. This transistor is specifically designed for **SATCOM 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	55 Volts
LVceo Collector to Emitter Voltage	27 Volts
BVebo Emitter to Base Voltage	3.5 Volts
Ic Collector Current	2.0 Amps
Maximum Temperatures	
Storage Temperature	- 65 to + 150°C
Operating Junction Temperature	+ 200°C

CASE OUTLINE 55CW COMMON EMITTER



ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
P-1dB	Power Out 1 dB comp pt.	F =1660 MHz	5			Watt
Pg	Power Gain	Icq = 20 mAmps Vcc= 26V	9.0	11		dB
IMD₃	Intermod. distortion -3rd	5 W PEP, Two Tone			-32	dBc
VSWR	Load Mismatch Tolerance				6:1	

BVces	Collector to Emitter Breakdown	Ic = 15 mA	55			Volts
BVceo	Collector to Emitter Breakdown	Ic = 15 mA	27			Volts
BVebo	Emitter to Base Breakdown	Ie = 10 mA	3.5			Volts
Ices	Collector Leakage Current	Vce = 26 Volts			5	mA
h_{FE}	DC - Current Gain	Vce = 5 V, Ic =0.1 A	20		100	
Cob	Output Capacitance	F =1 MHz, Vcb = 28 V		6		pF
θjc	Thermal Resistance	Tc = 25°C			6.0	°C/W

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