

1617AB15

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

GENERAL DESCRIPTION

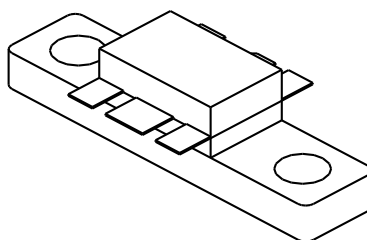
The 1617AB15 is a COMMON EMITTER transistor capable of providing 15 Watts PEP of Class AB, RF output power over the band 1600 - 1700 MHz. This transistor is specifically designed for **SATCOM BASE STATION** amplifier applications. It includes Input prematching and utilizes Gold metalization and HIGH VALUE EMITTER ballasting to provide high reliability and supreme ruggedness.

ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C	58 Watts
Maximum Voltage and Current	
BVces Collector to Emitter Voltage	60 Volts
LVceo Collector to Emitter Voltage	27 Volts
BVebo Emitter to Base Voltage	3.5 Volts
Ic Collector Current	6.0 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 =1700 MHz	15			Watt
Pg	Power Gain	Icq = 100 mAmps Vcc= 26V	10.0	12		dB
IMD₃	Intermod. distortion -3rd	15 W PEP, Two Tone			-32	dBc
VSWR	Load Mismatch Tolerance				6:1	

BVces	Collector to Emitter Breakdown	Ic = 50 mA	60			Volts
LVceo	Collector to Emitter Breakdown	Ic = 50 mA	27			Volts
BVebo	Emitter to Base Breakdown	Ie = 10 mA	3.5			Volts
Ices	Collector Leakage Current	Vce = 26 Volts			10	mA
h_{FE}	DC - Current Gain	Vce = 5 V, Ic =0.5 A	20		100	
Cob	Output Capacitance	F =1 MHz, Vcb = 28 V		20		pF
θjc	Thermal Resistance	Tc = 25°C			3.0	°C/W

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