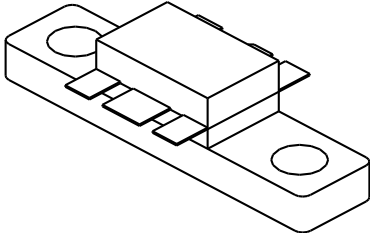


1617AB15

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

<p>GENERAL DESCRIPTION</p> <p>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.</p>	<p style="text-align: center;">CASE OUTLINE 55CW COMMON EMITTER</p> 
<p>ABSOLUTE MAXIMUM RATINGS</p> <p>Maximum Power Dissipation @ 25°C 58 Watts</p> <p>Maximum Voltage and Current</p> <p>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</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
P-1dB	Power Out 1 dB comp pt.	F = 1700 MHz	15			Watt
Pg	Power Gain	Ic = 100 mA, 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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