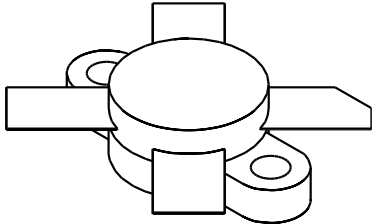


VAM 120

120 Watts, 27 Volts, Class AB
Defcom 100 - 150 MHz

<p>GENERAL DESCRIPTION The VAM 120 is a COMMON EMITTER device designed to operate in a collector modulated VHF power amplifier. It is a common emitter device, optimized for use in the 100-150 MHz range.</p>	<p>CASE OUTLINE 55HT, Style 2</p> 
<p>ABSOLUTE MAXIMUM RATINGS</p> <p>Maximum Power Dissipation @ 25°C 140 Watts</p> <p>Maximum Voltage and Current</p> <p>BVces Collector to Emitter Voltage 60 Volts BVebo Emitter to Base Voltage 4.0 Volts Ic Collector Current 12 A</p> <p>Maximum Temperatures</p> <p>Storage Temperature - 65 to +150°C Operating Junction Temperature +200°C</p>	

ELECTRICAL CHARACTERISTICS @ 25 °C

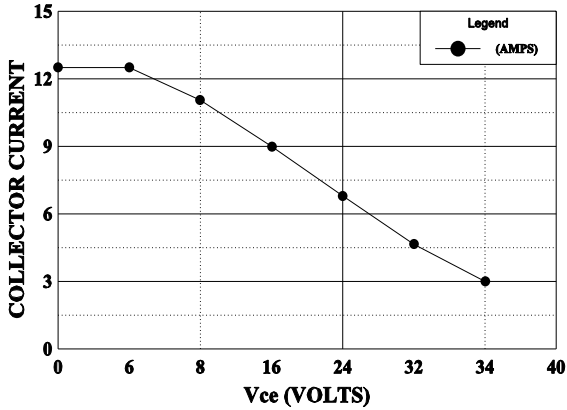
SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
P_{out}	Power Output	F = 150 MHz	120			Watts
P_{in}	Power Input	V _{cc} = 27 Volts		15	20	Watts
P_g	Power Gain		7.8	9.0		dB
P_{out}		F = 150 MHz	30			Watts
P_{in}		V _{cc} = 13.5 Volts		7.5	10	Watts
P_g			4.8	6.0		dB
η_c	Efficiency			65		%
V_{SWR}	Load Mismatch Tolerance				30:1	

BVebo	Emitter to Base Breakdown	I _e = 5 mA	4.0			Volts
BVces	Collector to Emitter Breakdown	I _c = 20 mA	60			Volts
BVceo	Collector to Emitter Breakdown	I _e = 50 mA	32			Volts
Cob	Output Capacitance			240		pF
h_{FE}	DC - Current Gain	V _{ce} = 5 V, I _c = 1 A	10			
θ_{jc}	Thermal Resistance				1.2	°C/W

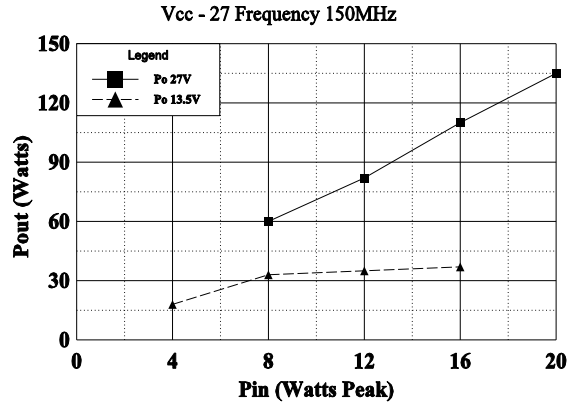
Issue August 1996

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.

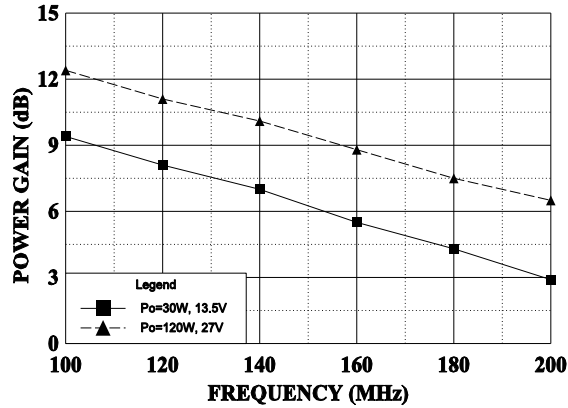
DC SAFE OPERATING AREA



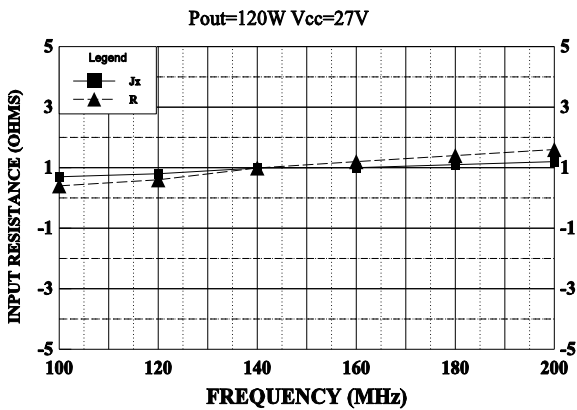
POWER OUTPUT vs POWER INPUT



POWER GAIN VS FREQUENCY



SERIES INPUT IMPEDANCE vs FREQUENCY



SERIES LOAD IMPEDANCE vs FREQUENCY

