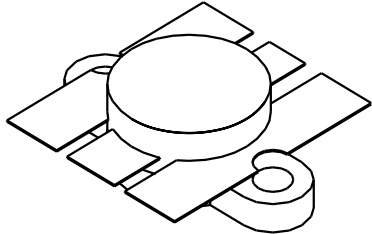


VMIL 100

100 Watts, 28 Volts, Class AB
Defcom 100 - 200 MHz

<p>GENERAL DESCRIPTION The VMIL100 is an input matched COMMON EMITTER broadband transistor specifically intended for use in the 100-200 MHz frequency band. It may be operated in Class AB or C. Gold metallization and silicon diffused resistors ensure ruggedness and high reliability.</p>	<p>CASE OUTLINE 55HV, Style 2</p> 
<p>ABSOLUTE MAXIMUM RATINGS Maximum Power Dissipation @ 25°C 270 Watts</p> <p>Maximum Voltage and Current BVces Collector to Emitter Voltage 65 Volts BVebo Emitter to Base Voltage 4.0 Volts Ic Collector Current 20 A</p> <p>Maximum Temperatures Storage Temperature - 65 to +150°C Operating Junction Temperature +150°C</p>	

ELECTRICAL CHARACTERISTICS @ 25 °C

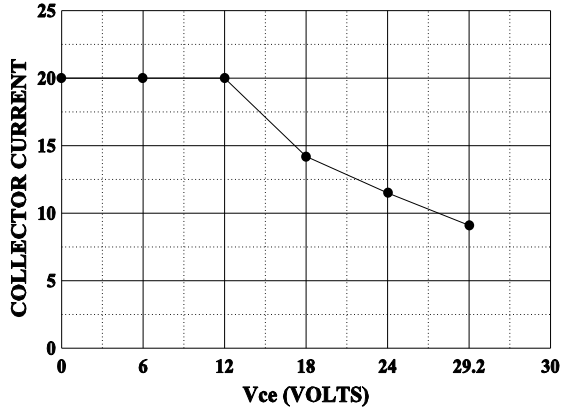
SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Output	F = 175 MHz	100			Watts
Pin	Power Input	Vcc = 28 Volts		14	20	Watts
Pg	Power Gain		7.0	8.5		dB
η_c	Efficiency			60		%
VSWR	Load Mismatch Tolerance	Po=100W, F=175 MHz			30:1	

BVebo	Emitter to Base Breakdown	Ie = 5 mA	4.0			Volts
BVces	Collector to Emitter Breakdown	Ic = 100 mA	65			Volts
BVceo	Collector to Emitter Breakdown	Ie = 50 mA	33			Volts
Cob	Output Capacitance	Vcb = 28 V, F = 1 MHz		220		pF
h_{FE}	DC - Current Gain	Vce = 5 V, Ic = 1 A	10			
θ_{jc}	Thermal Resistance				.65	°C/W

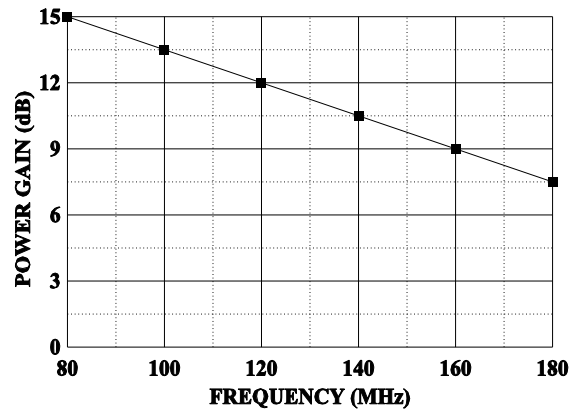
Issue August 1996

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DC SAFE OPERATING AREA



POWER GAIN VS FREQUENCY



POWER OUTPUT vs POWER INPUT

Vcc= 28V f=200MHz

