VMOB70

70 WATT - 12.5 VOLTS 136-175 MHz

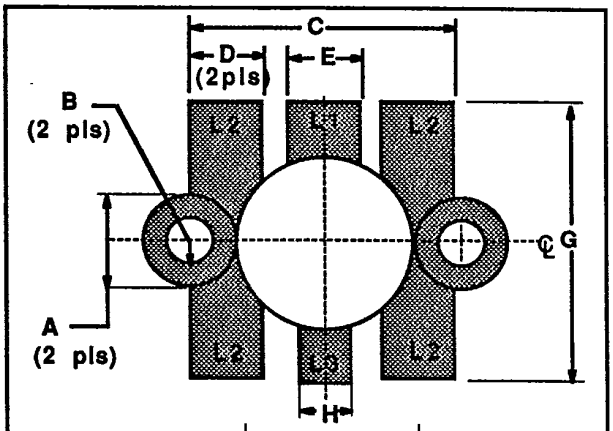
MOBILE COMMUNICATIONS

GENERAL DESCRIPTION

This device utilizes the most advanced design and process technologies. These features provide the most consistent and reliable chip and package combination designed, built and tested specifically for use in VHF, 12 volt land mobile applications.

ABSOLUTE MAXIMUM RATINGS

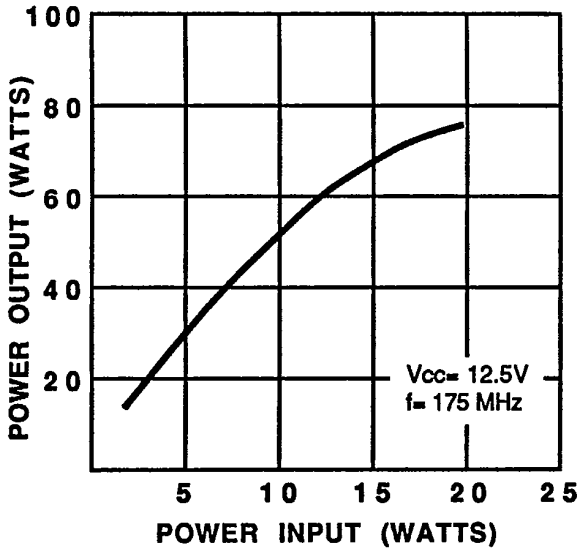
Maximum Power Dissipation @ 25°C Case Temperature		195 W
Maximum Voltage and Current		
BVces	Collector to Emitter Voltage	36V
BVebo	Emitter to Base Voltage	4.0V
Ic	Collector Current	15 A
Maximum Temperatures		
Storage Temperature		-65 to +150 °C
Operating JunctionTemperature		+200 °C



L1 : B
L2 : E
L3 : C

DIM	Millimeter	TOL	Inches	TOL
A	6.35 DIA	.13	.250 DIA	.005
B	3.17 DIA	.13	.125 DIA	.005
C	18.41	.13	.725	.005
D	5.46	.13	.215	.005
E	5.21	.13	.205	.005
F	6.73	REF	.265	REF
G	17.27	.38	.680	.015
H	3.94	.13	.155	.005
I	12.70 DIA	.13	.500DIA	.005
J	0.13	.02	.005	.001
K	24.76	.13	.975	.005
M	2.41	.13	.095	.005
N	4.32	.13	.170	.005

POWER OUTPUT VS POWER INPUT (TYPICAL)



TYPICAL AMPLIFIER LINE UP

Vcc=12.5 Volts
Frequency Range=136 - 175 MHz



490 Race Street, San Jose, CA 95126 Phone (408) 294-4200, TWX (910) 338-2172
Ewenny Rd., Bridgend, Mid Glamorgan, CF31 3LQ, United Kingdom, Phone (0656) 68021

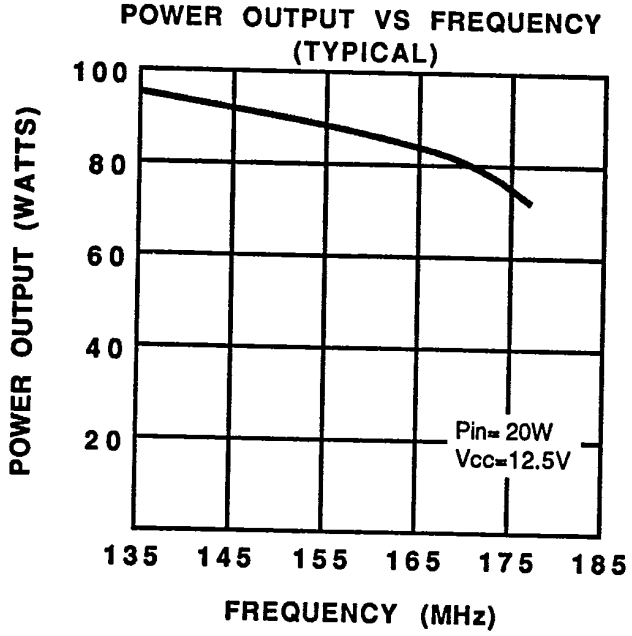
REV A AUG 1987
Printed in USA

VMOB70-2

ELECTRICAL CHARACTERISTICS[1]

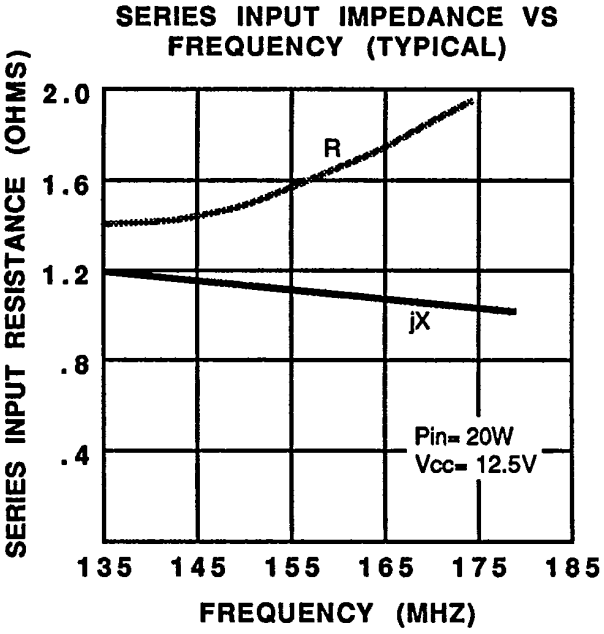
SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
Pout	Power Output	f= 136 - 175 MHz Vcc= 12.5V	70			Watts
Pin	Power Input			18	20	Watts
Pg	Power Gain			6.0		dB
η_c	Collector Efficiency			65		%
VSWR	Load Mismatch Tolerance	f = 150 MHz, Pin = 20W, Vcc = 16V			25:1	
BVebo	Breakdown Voltage (Emitter to Base)	Ic= 0A, Ie= 10mA	4.0			Volts
BVces	Breakdown Voltage (Collector to Emitter)	Vbe= 0A, Ic= 50 mA	36			Volts
BVceo	Breakdown Voltage (Collector to Emitter)	Ib= 0A, Ic= 50 mA	16			Volts
θjc	Thermal Resistance				0.9	°C/W
h_{FE}	DC Current Gain	Vc = 5v, Ic = 1A	10			

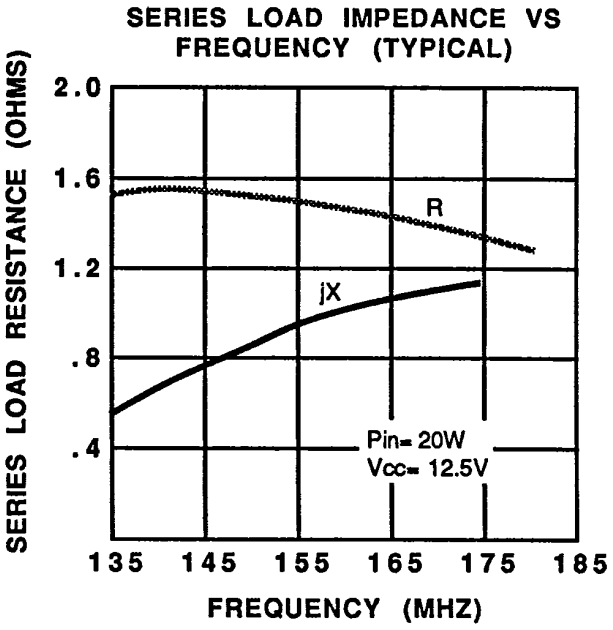
Note 1: Tc = +25°C unless otherwise specified



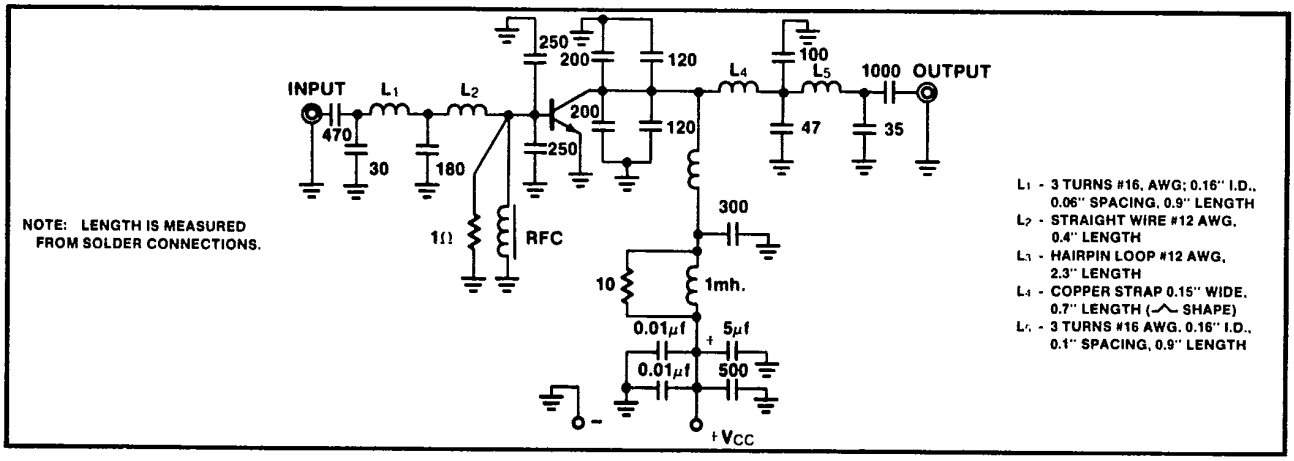
SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE

VMOB70-3





136-175 MHz TEST AMPLIFIER



NOTE 1. Under the normal operating conditions as specified. Junction temperature to be 200°C maximum as measured by I.R. scan of the chip.