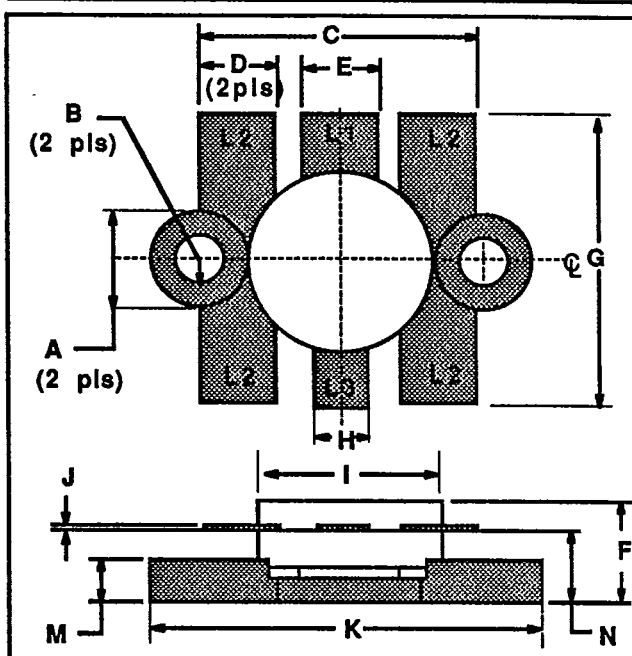


GENERAL DESCRIPTION

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.

VMOB70
70 WATT - 12.5 VOLTS
136-175 MHz

MOBILE COMMUNICATIONS



DIM	Millimeter	TOL	Inches	TOL
L1 : B				
L2 : E				
L3 : C				
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	.500 DIA	.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

ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C Case Temperature 195 W

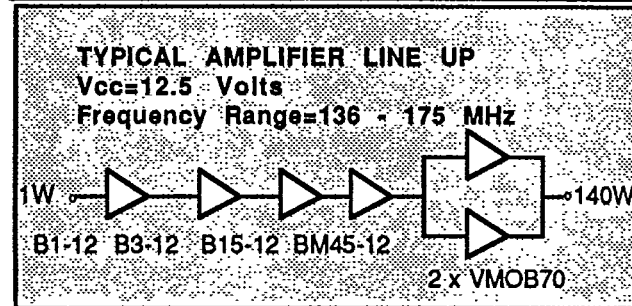
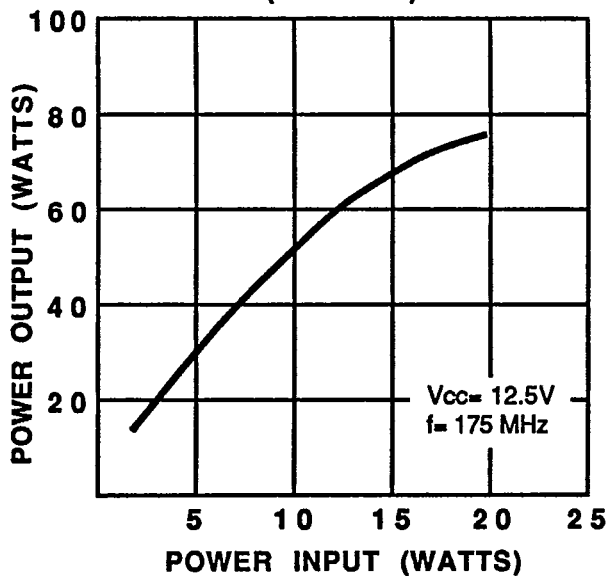
Maximum Voltage and Current

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 Junction Temperature +200 °C

POWER OUTPUT VS POWER INPUT (TYPICAL)

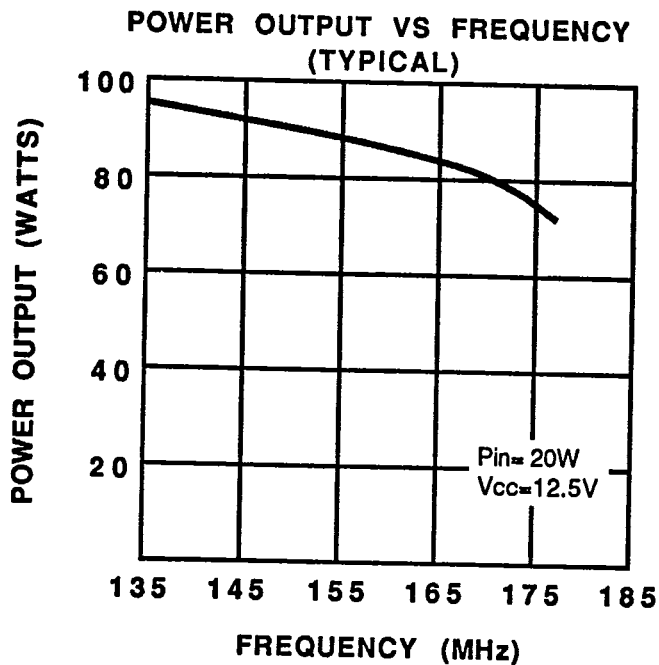


VMOB70-2

ELECTRICAL CHARACTERISTICS¹

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
θ_{jc}	Thermal Resistance				0.9	°C/W
h_{FE}	DC Current Gain	Vc = 5v, Ic = 1A	10			

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

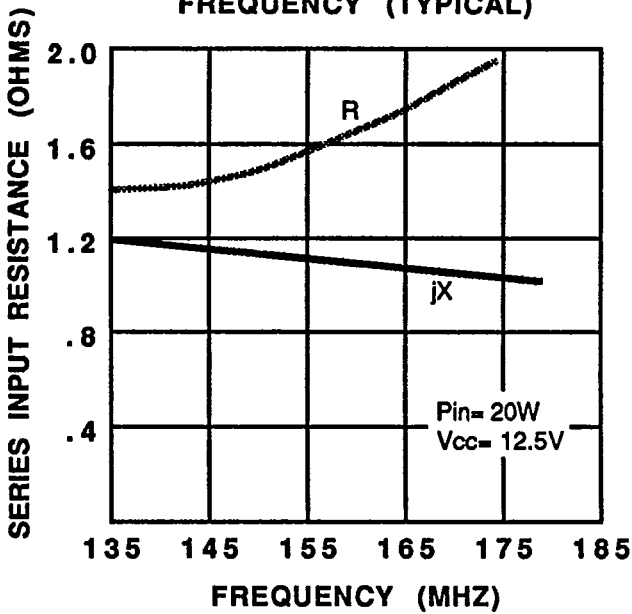


SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE

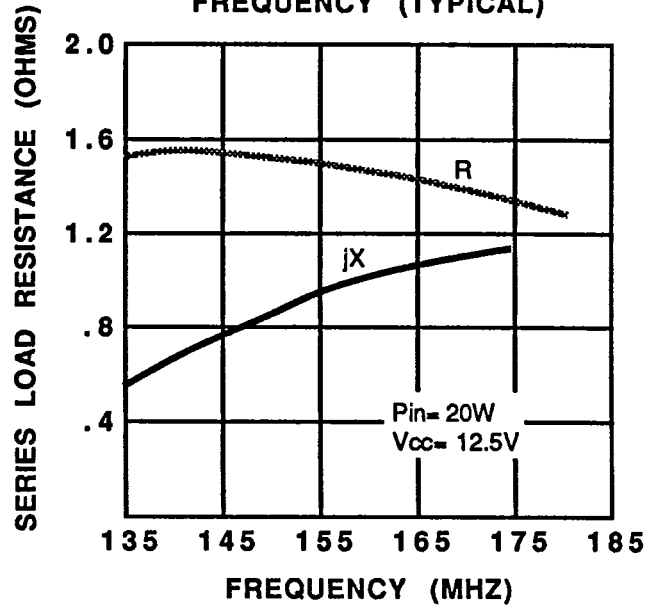
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VMOB70-3

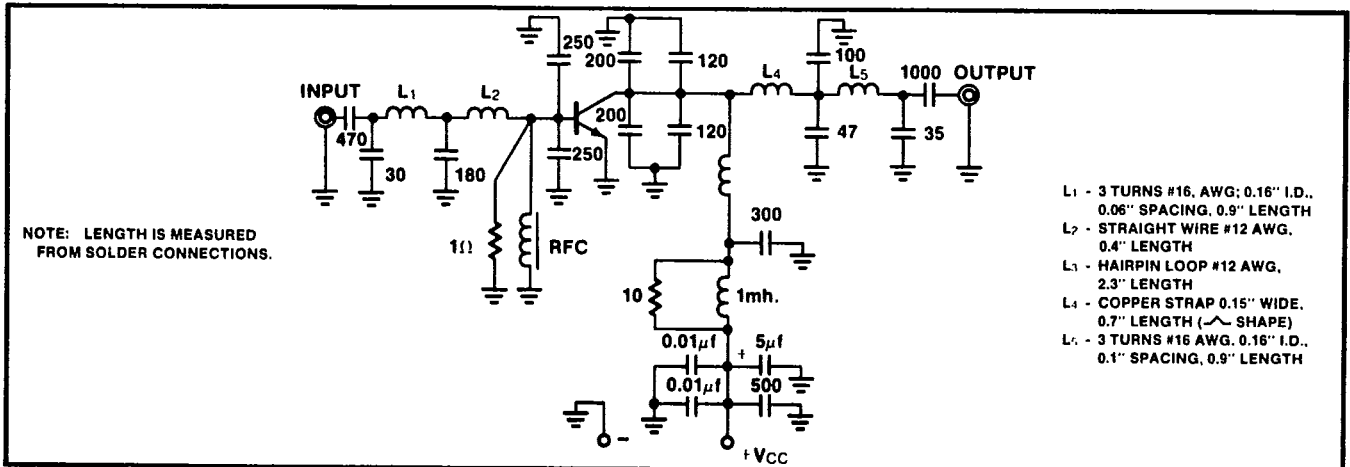
SERIES INPUT IMPEDANCE VS FREQUENCY (TYPICAL)



SERIES LOAD IMPEDANCE VS FREQUENCY (TYPICAL)



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.

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