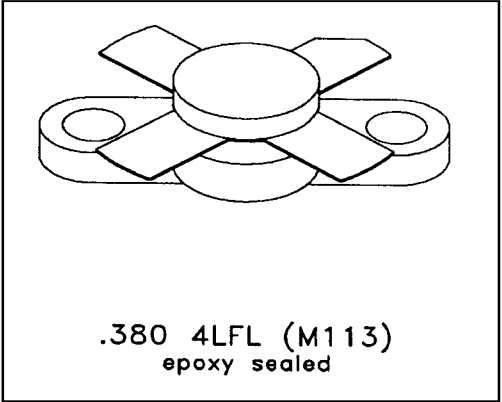


MS4080

**RF & MICROWAVE TRANSISTORS
 HF/VHF/UHF N-CHANNEL MOSFETS**

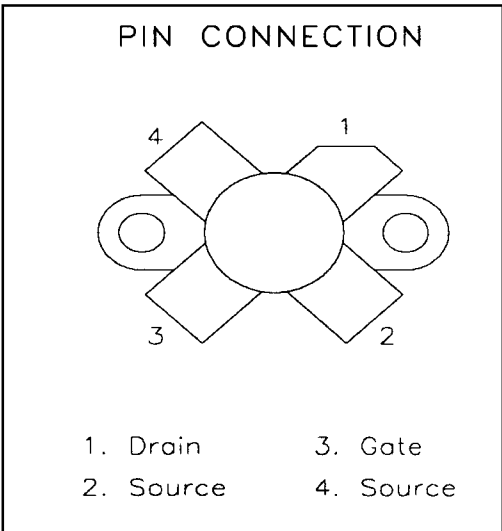
Features

- 2 - 400 MHz
- 15 WATTS
- 28 VOLTS
- 13 dB MIN. AT 150 MHz
- CLASS A OR AB



DESCRIPTION:

The MS4080 is a gold metallized N-Channel Enhancement Mode MOSFET. The MS4080 is intended for use in 28 Vdc large signal applications up to 400 MHz.



ABSOLUTE MAXIMUM RATINGS (Tcase = 25°C)

Symbol	Parameter	Value	Unit
V _{(BR)DSS}	Drain - Source Voltage	65	V
V _{DGR}	Drain - Gate Voltage	65	V
V _{GS}	Gate - Source Voltage	± 40	V
I _D	Drain Current	2.5	A
P _{DISS}	Power Dissipation	55	W
T _{STG}	Storage Temperature	-65 to +150	°C
T _J	Junction Temperature	200	°C

Thermal Data

R _{TH(j-c)}	Junction - Case Thermal Resistance	3.2	°C/W
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ELECTRICAL SPECIFICATIONS (T_{case} = 25°C)

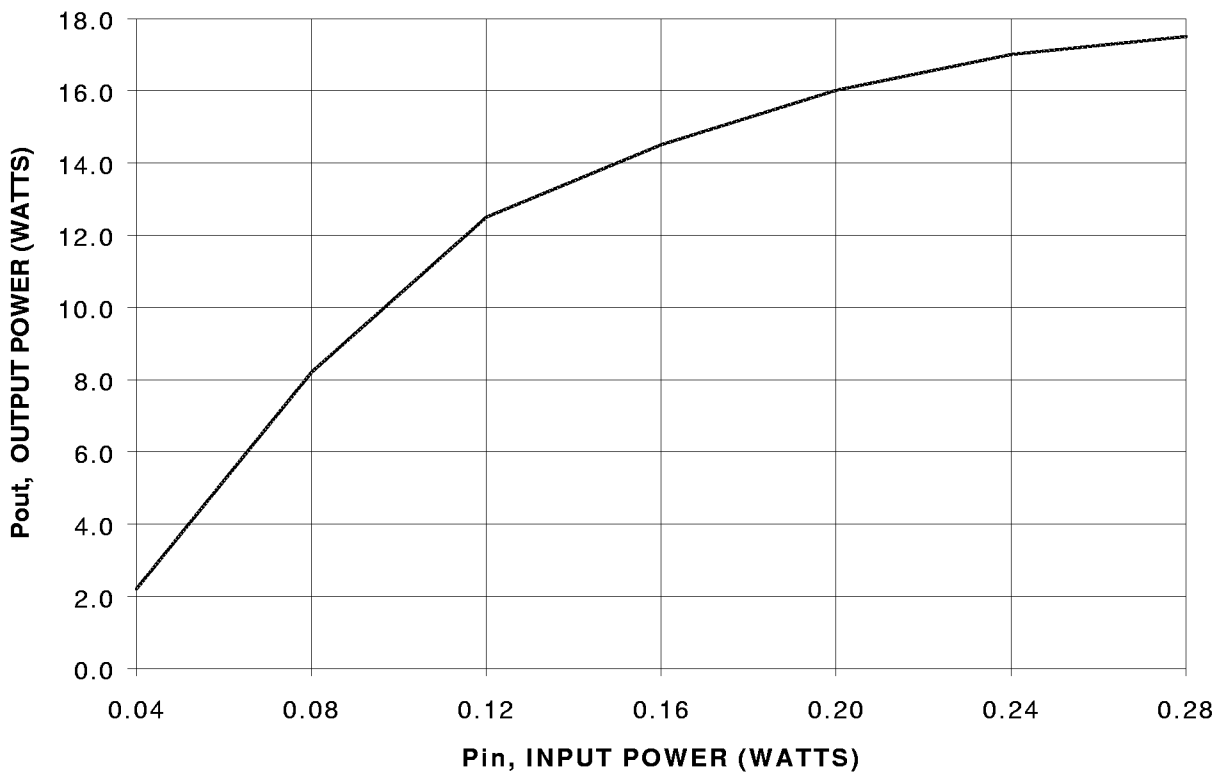
STATIC

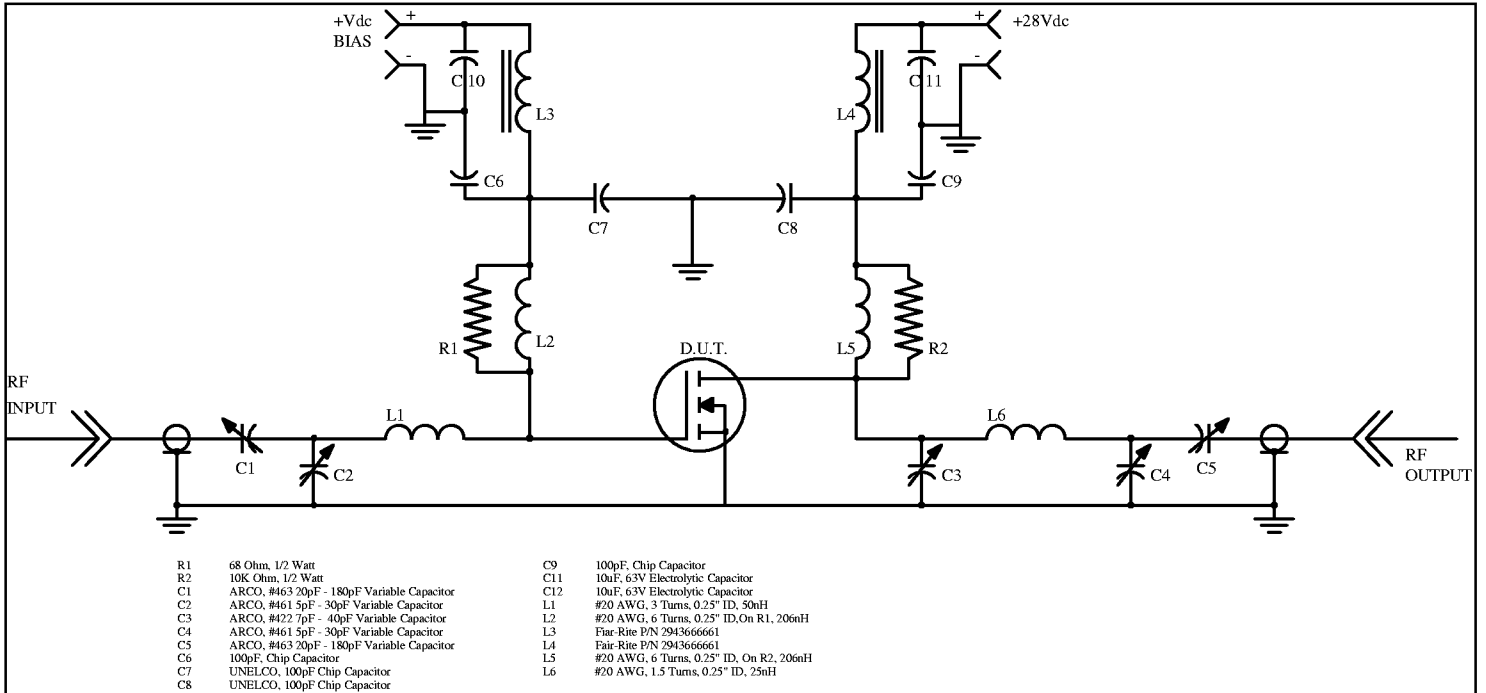
Symbol	Test Conditions	Value			Unit
		Min.	Typ.	Max.	
V _{(BR)DSS}	V _{GS} = 0V I _{DS} = 5mA	60	----	----	V
I _{DSS}	V _{GS} = 0V V _{DS} = 28V	----	----	2.0	mA
I _{GSS}	V _{GS} = 40V V _{DS} = 0V	----	----	1.0	μA
V _{GS}	V _{DS} = 10V I _D = 25mA	1.0	----	6.0	V
G _{FS}	V _{DS} = 10V I _D = 250mA	0.25	----	----	mho
C _{ISS}	V _{DS} = 28V V _{GS} = 0V f = 1MHz	----	21.5	----	pF
C _{OSS}	V _{DS} = 28V V _{GS} = 0V f = 1MHz	----	16.5	----	pF
C _{RSS}	V _{DS} = 28V V _{GS} = 0V f = 1MHz	----	2.70	----	pF

DYNAMIC

Symbol	Test Conditions	Value			Unit
		Min.	Typ.	Max.	
P _{IN}	f = 150 MHz V _{DD} = 28V P _{OUT} = 15 W(PEP) I _{DQ} = 25mA	----	----	0.75	W
G _{PS}	f = 150 MHz V _{DD} = 28V P _{OUT} = 15 W(PEP) I _{DQ} = 25mA	13	----	----	dB
η	f = 150 MHz V _{DD} = 28V P _{OUT} = 15 W(PEP) I _{DQ} = 25mA	50	----	----	%

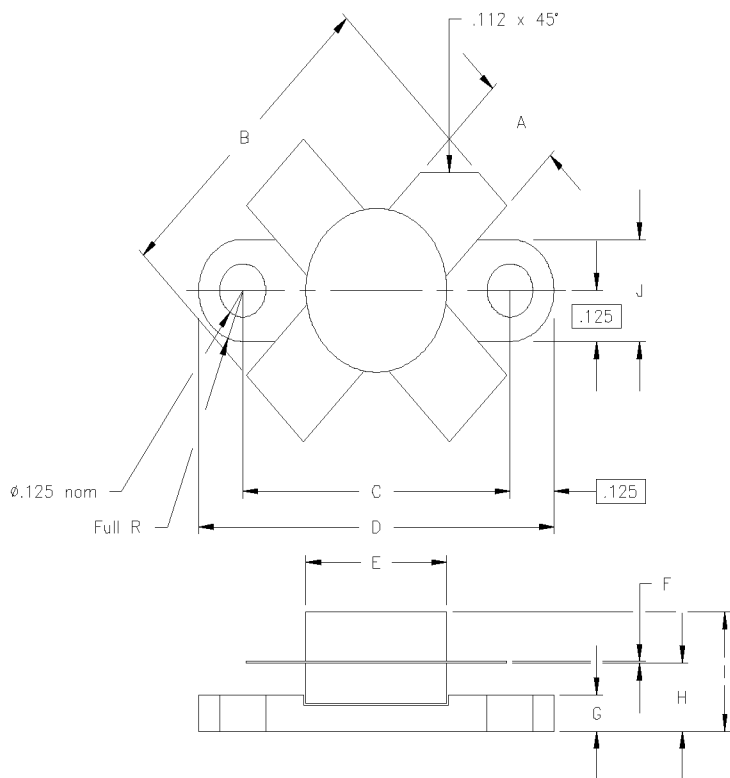
Power Out vs Power In





MS4080 150MHz Test Circuit

PACKAGE MECHANICAL DATA



	Minimum Inches/mm	Maximum Inches/mm
A	.220/5.59	.230/5.84
B	.785/19.94	---
C	.720/18.29	.730/18.54
D	.970/24.64	.980/24.89
E	---	.385/9.78
F	.004/0.10	.006/0.15
G	.085/2.16	.105/2.67
H	.160/4.06	.180/4.57
I	---	.280/7.11
J	.240/6.10	.255/6.48