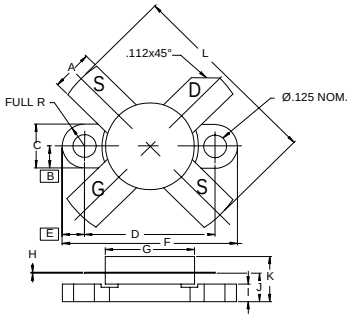
SILICON N-CHANNEL RF POWER MOSFET

DESCRIPTION:

The **MRF161** is an Enhancement-Mode N-Channel MOS Broadband RF Power Transistor for Wideband Large Signal Amplifier and Oscillator Applications from 2.0 to 400 MHz.

PACKAGE STYLE .500 4L FLG



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.125 / 3.18	
C	.245 / 6.22	.255 / 6.48
D	.720 / 18.28	.7.30 / 18.54
E	.125 / 3.18	
F	.970 / 24.64	.980 / 24.89
G	.495 / 12.57	.505 / 12.83
H	.003 / 0.08	.007 / 0.18
I	.090 / 2.29	.110 / 2.79
J	.150 / 3.81	.175 / 4.45
K		.280 / 7.11
L	.980 / 24.89	1.050 / 26.67

MAXIMUM RATINGS

I_D	900 mA
V_{DSS}	65 V
V_{GS}	±40 V
P_{DISS}	17.5 W @ T_C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	10 °C/W

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$V_{(BR)DSS}$	I_D = 5.0 mA V_{GS} = 0 V	65			V
I_{DSS}	V_{DSS} = 28 V V_{GS} = 0 V			1.0	mA
I_{GSS}	V_{GS} = 40 V V_{DS} = 0 V			1.0	µA
$V_{GS(th)}$	V_{DS} = 10 V I_D = 10 mA	1.0		6.0	V
g_{fs}	V_{DS} = 10 V I_D = 100 mA	80			mmhos
C_{iss} C_{oss} C_{rss}	V_{DS} = 28 V V_{GS} = 0 V f = 1.0 MHz		7.0 9.7 2.3		pF
NF	V_{DS} = 28 V I_D = 100 mA f = 400 MHz Z_S = 67.7+j = 14.1 Z_L = 14.5+j = 25.7		3.0		dB
G_{ps} η	V_{DD} = 28 V I_{DQ} = 50 mA P_{out} = 5.0 W	11.0 45	13.5 50		dB %
ψ	V_{DD} = 28 V I_{DQ} = 50 mA P_{out} = 5.0 W V_{SWR} = 30:1 AT ALL PHASE ANGLES	NO DEGRADRADATION IN OUTPUT POWER			

Specifications are subject to change without notice.