

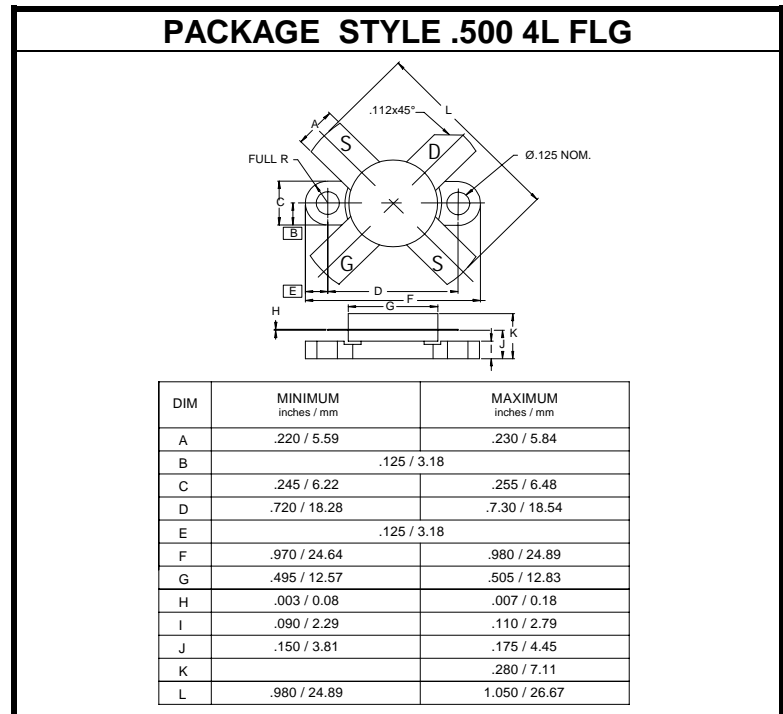
SILICON RF POWER MOSFET

DESCRIPTION:

The **MRF150** is an N-Channel Enhancement-Mode MOS Broadband RF Power Transistor Designed for Wideband Large Signal Amplifier Applications From 2.0 to 150 MHz.

MAXIMUM RATINGS

I_D	16 A
V_{DSS}	125 V
V_{GS}	± 40 V
P_{DISS}	300 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 = 100 mA V _{GS} = 0 V	125			V
I_{DSS}	V _{DSS} = 50 V V _{GS} = 0 V			5.0	mA
I_{GSS}	V _{GS} = 20 V V _{DS} = 0 V			1.0	μA
V_{GS(th)}	V _{DS} = 10 V I _D = 100 mA	1.0		5.0	V
g_{fs}	V _{DS} = 10 V I _D = 100 mA	4			mho
C_{iss} C_{oss} C_{rss}	V _{DS} = 50 V V _{GS} = 0 V f = 1.0 MHz		350 250 50		pF
G_{ps} η	V _{DD} = 50 V I _{DQ} = 250 mA P _{out} = 150 W (PEP) F _o = 30 & 30.001 MHz	45	17.0 50		dB %
ψ	VSWR = 30:1 AT ALL PHASE ANGLES	NO DEGRADATION IN OUTPUT POWER			