

MRF171

TMOS RF FET

N-Channel Enhancement Mode

DESCRIPTION:

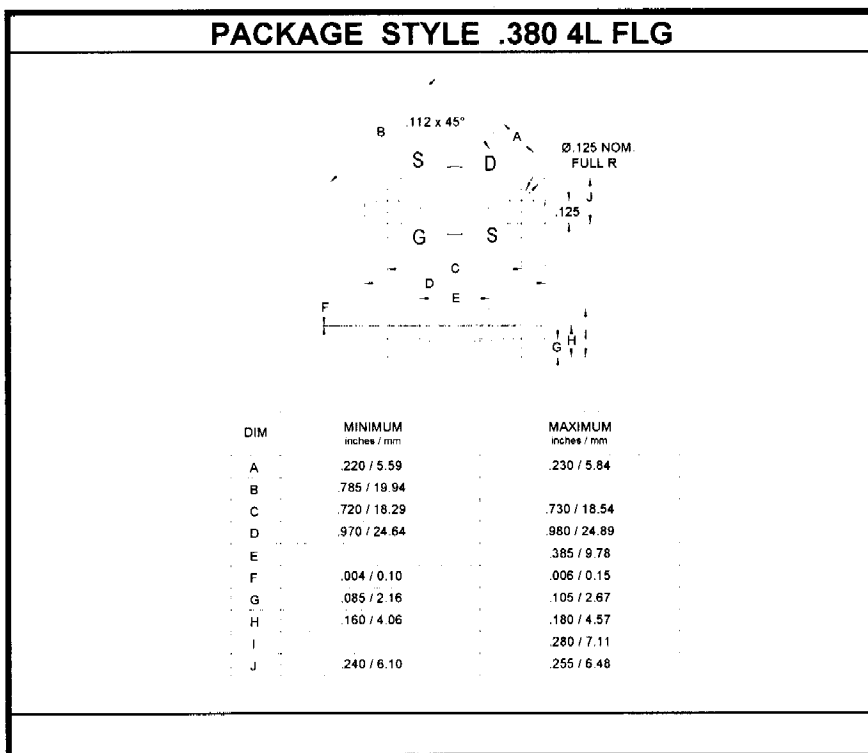
MRF171 is a gold metallized N-Channel Enhancement mode MOSFET, intended for use in 28 VDC large signal applications to 200 MHz.

FEATURES:

- $P_G = 12$ dB min at 150 MHz
- **Omnigold™** Metalization System
- 2 – 200 MHz operation

MAXIMUM RATINGS

I_D	4.5 A
V_{DSS}	65 V
V_{DGR}	65 V
V_{GS}	± 40 V
P_{DISS}	115 W @ $T_C = 25^\circ\text{C}$
T_J	-65°C to $+200^\circ\text{C}$
T_{STG}	-65°C to $+150^\circ\text{C}$
θ_{JC}	1.52 $^\circ\text{C/W}$



CHARACTERISTICS $T_C = 25^\circ\text{C}$

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{DSS}	$I_{DS} = 10$ mA	$V_{GS} = 0$ V	65			V
I_{DSS}	$V_{DS} = 28$ V	$V_{GS} = 0$ V			5.0	mA
I_{GSS}	$V_{DS} = 0$ V	$V_{GS} = 20$ V			1.0	μA
$V_{GS(th)}$	$I_D = 25$ mA	$V_{DS} = 10$ V	1.0		6.0	V
g_{fs}	$I_D = 1$ A	$V_{DS} = 10$ V	0.7			mho
C_{iss} C_{oss} C_{rss}	$V_{DS} = 28$ V	$V_{GS} = 0$ V		55 70 14		pF
G_{ps} η	$V_{DD} = 28$ V $f = 150$ MHz	$I_{DQ} = 25$ mA	$P_{out} = 45$ W	12 50	15 60	dB %

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.