

TMOS RF FET

N-Channel Enhancement Mode

DESCRIPTION:

The **ASI 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 @ $T_C = 25$ °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	1.52 °C/W

PACKAGE STYLE .380 4L FLG

DIM	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

CHARACTERISTICS $T_C = 25$ °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	μ A
$V_{GS(th)}$	$I_D = 25$ 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 %