

# RF POWER FET

## N-Channel Enhancement Mode

**DESCRIPTION:**

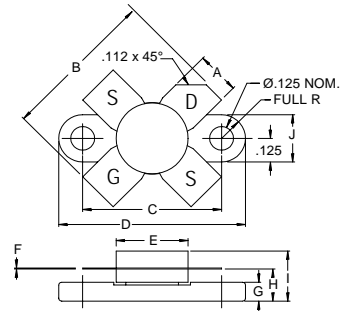
The **ASI MRF173** is Designed for wideband large-signal output and driver stages up to 200 MHz frequency range.

**FEATURES:**

- $P_G = 11$  dB Min. at 150 MHz
- **30:1 Load VSWR** Capability
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_D$	9.0 A
$V_{DSS}$	65 V
$V_{GS}$	$\pm 40$ V
$P_{DISS}$	220 W @ $T_C = 25^\circ\text{C}$
$T_J$	$-65^\circ\text{C}$ to $+200^\circ\text{C}$
$T_{STG}$	$-65^\circ\text{C}$ to $+150^\circ\text{C}$
$\theta_{JC}$	0.8 $^\circ\text{C}/\text{W}$

**PACKAGE STYLE .500 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**  $T_C = 25^\circ\text{C}$ 

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{DSS}$	$I_{DS} = 50$ mA	65			V
$I_{DSS}$	$V_{DS} = 28$ V $V_{GS} = 0$ V			2.0	mA
$I_{GSS}$	$V_{DS} = 0$ V $V_{GS} = 40$ V			1.0	$\mu\text{A}$
$V_{GS(th)}$	$I_D = 50$ mA $V_{DS} = 10$ V	1.0		6.0	V
$g_{fs}$	$I_D = 2.0$ A $V_{DS} = 10$ V	1.8	2.2		mho
$C_{iss}$ $C_{oss}$ $C_{rss}$	$V_{DS} = 28$ V $V_{GS} = 0$ V $f = 1.0$ MHz		110 105 10		pF
$P_G$ $\eta_D$	$V_{DD} = 28$ V $I_{DQ} = 50$ mA $P_{out} = 80$ W $f = 150$ MHz	11 55	13 60		dB %
$\psi$	$V_{SWR} = 30:1$ AT ALL PHASE ANGLES	NO DEGRADATION IN OUTPUT POWER			