# 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.

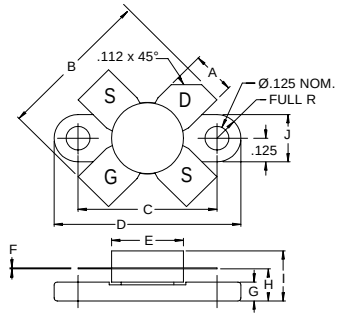
### FEATURES:

- $P_G$ = 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 |
| $\theta_{JC}$ | 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 | 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 |
| $C_{iss}$<br>$C_{oss}$<br>$C_{rss}$ | $V_{DS}$ = 28 V | $V_{GS}$ = 0 V | f = 1.0 MHz | | 55<br>70<br>14 | | pF |
| $G_{ps}$<br>$\eta$ | $V_{DD}$ = 28 V<br>f = 150 MHz | $I_{DQ}$ = 25 mA | $P_{out}$ = 45 W | 12<br>50 | 15<br>60 | | dB<br>% |



*Specifications are subject to change without notice.*