

VHF POWER MOSFET

N-Channel Enhancement Mode

DESCRIPTION:

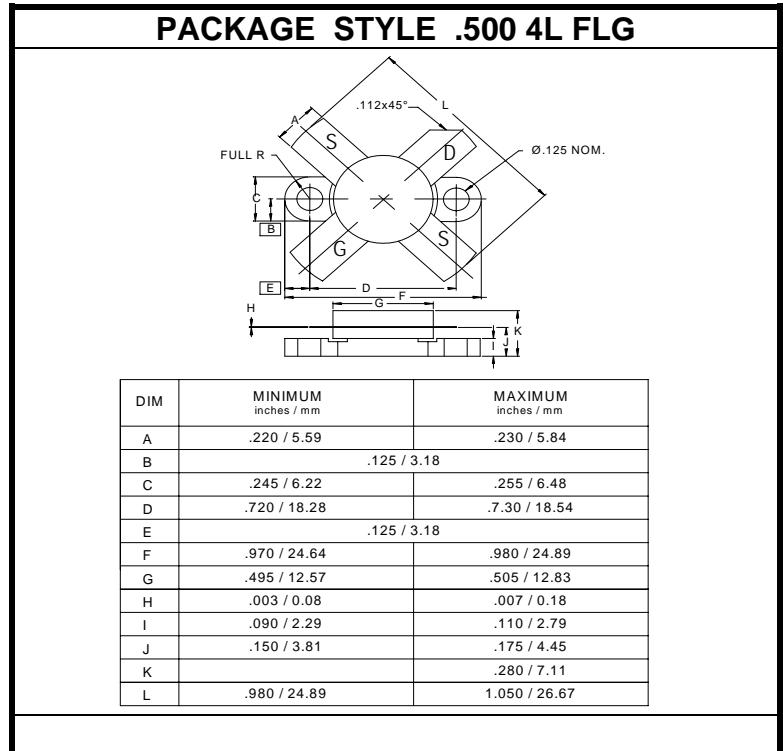
The **ASI MRF174** is a gold metallized N-Channel enhancement mode MOSFET, intended for use in 28 VDC large signal applications to 200 MHz.

FEATURES:

- $P_G = 9.0$ dB min. at 150 MHz
- **Omnigold™** Metalization System
- Class-A

MAXIMUM RATINGS

I_D	13 A
V_{DSS}	65 V
V_{GS}	± 40 V
V_{DGR}	65 V
P_{DISS}	270 W @ $T_C = 25^\circ C$
T_J	$-65^\circ C$ to $+200^\circ C$
T_{STG}	$-65^\circ C$ to $+150^\circ C$
θ_{JC}	$0.65^\circ C/W$


CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{DSS}	$I_D = 50$ mA		65			V
I_{DSS}	$V_{DS} = 28$ V	$V_{GS} = 0$ V			10	mA
I_{GSS}	$V_{DS} = 0$ V	$V_{GS} = 20$ V			1.0	μA
$V_{GS(th)}$	$I_D = 100$ mA	$V_{DS} = 10$ V	1.0	3.0	6.0	V
g_{fs}	$I_D = 3.0$ A	$V_{DS} = 10$ V	1.75	2.5		mho
C_{iss} C_{oss} C_{rss}	$V_{DS} = 28$ V	$V_{GS} = 0$ V		175 190 40		pF
NF	$I_D = 2.0$ A	$V_{DD} = 28$ V		3.0		dB
P_G η_D	$V_{DD} = 28$ V $I_{DQ} = 100$ mA	$I_{DQ} = 250$ mA	$P_{out} = 125$ W f = 150 MHz	9.0 60	11.8	dB %