

VHF POWER MOSFET

N-Channel Enhancement Mode

DESCRIPTION:

The **ASI MRF172** is Designed for wideband large-signal output and driver stages in the 2.0-200 MHz frequency range.

FEATURES:

- $P_G = 10$ 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}	± 40 V
P_{DISS}	220 W @ $T_C = 25$ °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	0.8 °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

ORDER CODE: ASI10830

CHARACTERISTICS $T_C = 25$ °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			5.0	mA
I_{GSS}	$V_{DS} = 0$ V $V_{GS} = 20$ V			1.0	μ A
$V_{GS(th)}$	$I_D = 50$ mA $V_{DS} = 10$ V	1.0		5.0	V
g_{fs}	$I_D = 2.5$ A $V_{DS} = 10$ V	1.5			mho
C_{iss} C_{oss} C_{rss}	$V_{DS} = 28$ V $V_{GS} = 0$ V $f = 1.0$ MHz		200 110 20		pF
P_G η_D	$V_{DD} = 28$ V $I_{DQ} = 50$ mA $P_{out} = 80$ W $f = 150$ MHz	10 50			dB %
ψ	$V_{SWR} = 30:1$ AT ALL PHASE ANGLES	NO DEGRADATION IN OUTPUT POWER			