

VHF POWER MOSFET N-Channel Enhancement Mode

DESCRIPTION:

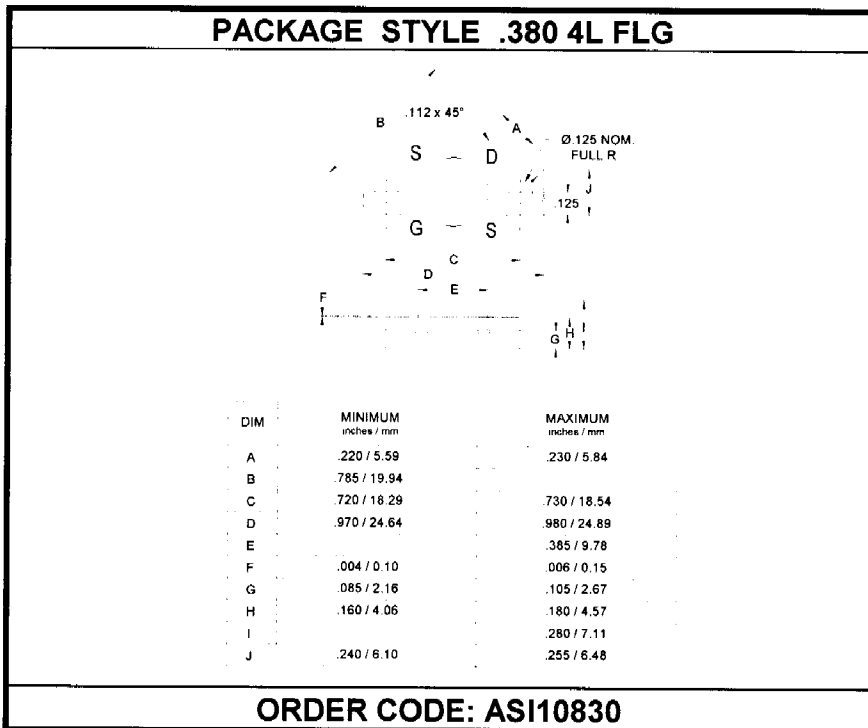
MRF172 is Designed for wideband large-signal output and driver stages in the 2.0-200 MHz frequency range.

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 @ $T_C = 25^\circ C$
T_J	$-65^\circ C$ to $+200^\circ C$
T_{STG}	$-65^\circ C$ to $+150^\circ C$
θ_{JC}	$0.8^\circ C/W$



CHARACTERISTICS $T_C = 25^\circ C$

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	μA
$V_{GS(th)}$	$I_D = 50$ 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			

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