

# VHF POWER MOSFET

## N-Channel Enhancement Mode

**DESCRIPTION:**

The **ASI VFT5-28** is a N-Channel Enhancement-Mode RF Power MOSFET Designed for AM and FM Power Amplifier Applications up to 250 MHz.

**FEATURES INCLUDE:**

- $P_G = 14$  dB Typical at 175 MHz
- 30:1 Load VSWR Capability
- *Omnigold*<sup>TM</sup> Metalization System

**MAXIMUM RATINGS**

$I_D$	1.0 A
$V_{DSS}$	60 V
$V_{GS}$	$\pm 40$ V
$P_{DISS}$	17.5 W @ $T_C = 25^\circ C$
$T_J$	$-65^\circ C$ to $+200^\circ C$
$T_{STG}$	$-65^\circ C$ to $+150^\circ C$
$q_{JC}$	$10^\circ C/W$

**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

**ASI ORDER CODE: ASI10701**

**CHARACTERISTICS**  $T_C = 25^\circ C$ 

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{DSS}$	$I_D = 5$ mA	60			V
$I_{DSS}$	$V_{DS} = 28$ V $V_{GS} = 0$ V			1.0	mA
$I_{GSS}$	$V_{DS} = 0$ V $V_{GS} = 20$ V			1.0	mA
$V_{GS(th)}$	$I_D = 25$ mA $V_{DS} = 10$ V	1.0		6.0	V
$g_{fs}$	$I_D = 250$ mA $V_{DS} = 10$ V	80			mS
$C_{iss}$ $C_{oss}$ $C_{rss}$	$V_{DS} = 28$ V $V_{GS} = 0$ V $f = 1.0$ MHz		9.0 7.0 1.0		pF
$P_G$ $h_D$	$V_{DD} = 50$ V $I_{DQ} = 50$ mA $P_{out} = 5.0$ W $F = 175$ MHz	13 50	14 60		dB %
$y$	$V_{SWR} = 30:1$ AT ALL PHASE ANGLES	NO DEGRADATION IN OUTPUT POWER			