

# VHF POWER MOSFET

## N-Channel Enhancement Mode

**DESCRIPTION:**

The **ASI VFT5-28** is a gold metallized N-Channel Enhancement mode MOSFET. Is intended for use in 28 VDC large signal Applications, for 400 MHz.

**FEATURES INCLUDE:**

- $P_G = 13$  dB Typical at 175 MHz
- **Omnigold™** Metalization System
- Class-A or AB
- 2 – 400 MHz operation

**MAXIMUM RATINGS**

$I_D$	0.9 A
$V_{DSS}$	60 V
$V_{DGR}$	65 V
$V_{GS}$	$\pm 40$ V
$P_{DISS}$	17.5 W @ $T_C = 25$ °C
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +150 °C
$\theta_{JC}$	10 °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**  $T_C = 25$  °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{DSS}$	$I_{DS} = 5$ 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	$\mu$ A
$V_{GS}$	$I_D = 25$ mA $V_{DS} = 10$ V	1.0		6.0	V
$g_{fs}$	$I_D = 250$ mA $V_{DS} = 10$ V	.08			mho
$C_{iss}$ $C_{oss}$ $C_{rss}$	$V_{GS} = 28$ V $V_{DS} = 0$ V $f = 1.0$ MHz		9.0 7.0 0.9		pF

## CHARACTERISTICS $T_C = 25^\circ\text{C}$

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
$P_G$	$V_{DD} = 28\text{ V}$	$I_{DQ} = 50\text{ mA}$	$P_{out} = 5.0\text{ W}$	13	14		dB
$\eta_D$	$P_{IN} = 0.39\text{ W}$		$f = 175\text{ MHz}$	50	60		%

