

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}	± 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 $+150^\circ C$
θ_{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}	$I_{DS} = 5$ 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	μA
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
η_D	$P_{IN} = 0.39\text{ W}$		$f = 175\text{ MHz}$	50	60		%

Power Out vs Power In

