

# VHF POWER MOSFET

## N-Channel Enhancement Mode

**DESCRIPTION:**

The **VFT80-28** is a gold metallized N-Channel Enhancement mode MOSFET, intended for use in 28 VDC large signal applications to 400 MHz.

**FEATURES:**

- $P_G = 10$  dB Typical at 175 MHz
- **Omnigold™** Metalization System
- Class-A or AB
- 2 – 400 MHz operation

**MAXIMUM RATINGS**

$I_D$	7.0 A
$V_{(BR)DSS}$	60 V
$V_{DGR}$	60 V
$V_{GS}$	$\pm 20$ V
$P_{DISS}$	100 W @ $T_C = 25^\circ\text{C}$
$T_J$	$-65^\circ\text{C}$ to $+200^\circ\text{C}$
$T_{STG}$	$-65^\circ\text{C}$ to $+150^\circ\text{C}$
$\theta_{JC}$	1.8 $^\circ\text{C}/\text{W}$

**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: ASI10704**

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

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{DSS}$	$I_{DS} = 10$ Ma	$V_{GS} = 0$ V	60			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	$\mu\text{A}$
$V_{GS}$	$I_D = 25$ mA	$V_{DS} = 10$ V	1.0		6.0	V
$g_{fs}$	$I_D = 1$ A	$V_{DS} = 10$ V	0.7			mho
$C_{iss}$ $C_{oss}$ $C_{rss}$	$V_{DS} = 28$ V	$V_{GS} = 0$ V		52 87 8		pF
$P_G$ $\eta_D$	$V_{DD} = 28$ V $P_{IN} = 2.85$ W	$I_{DQ} = 25$ mA	$P_{out} = 45$ W 50	14 60		dB %

