

# VHF POWER MOSFET

## N-Channel Enhancement Mode

**DESCRIPTION:**

The **VFT80-28** is Designed for General Purpose Class B Power Amplifier Applications up to 175 MHz.

**FEATURES:**

- $P_G = 10$  dB Typical at 175 MHz
- 30:1 Load VSWR Capability
- *Omnigold™* Metalization System

**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 @ $T_C = 25^\circ C$
$T_J$	$-65^\circ C$ to $+200^\circ C$
$T_{STG}$	$-65^\circ C$ to $+150^\circ C$
$q_{JC}$	1.8 $^\circ C/W$

**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

**ORDER CODE: ASI10704**

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{DSS}$	$I_D = 100$ mA	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	mA
$V_{GS(th)}$	$I_D = 25$ mA $V_{DS} = 10$ V	1.0		6.0	V
$g_{fs}$	$I_D = 1$ A $V_{DS} = 10$ V	700			mS
$C_{iss}$ $C_{oss}$ $C_{rss}$	$V_{DS} = 28$ V $V_{GS} = 0$ V $f = 1.0$ MHz		52 87 8		pF
$P_G$ $h_D$	$V_{DD} = 28$ V $I_{DQ} = 25$ mA $P_{out} = 45$ W $F = 175$ MHz	12 50	15 60		dB %
$y$	$V_{SWR} = 30:1$ AT ALL PHASE ANGLES	NO DEGRADATION IN OUTPUT POWER			