

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
- 10:1 Load VSWR Capability
- *Omnigold™* Metalization System

MAXIMUM RATINGS

I_C	10 A
V_{CB}	60 V
V_{CE}	35 V
P_{DISS}	140 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}	$1.5^\circ C/W$

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: ASI10705

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
$V_{GS(th)}$	$I_D = 50$ mA	$V_{DS} = 10$ V		1.0		6.0	V
g_{fs}	$I_D = 2$ A	$V_{DS} = 10$ V		1200			mS
C_{iss} C_{oss} C_{rss}	$V_{DS} = 28$ V	$V_{GS} = 0$ V	$f = 1.0$ MHz		105 165 20		pF
P_G h_D	$V_{DD} = 28$ V	$I_{DQ} = 25$ mA	$P_{out} = 80$ W $f = 175$ MHz	10 50	12 60		dB %
y	$V_{SWR} = 30:1$ AT ALL PHASE ANGLES			NO DEGRADATION IN OUTPUT POWER			