

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*TM Metalization System

MAXIMUM RATINGS

I_D	7.0 A
$V_{(BR)DSS}$	60 V
V_{DGR}	60 V
V_{GS}	± 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			