

# VHF POWER MOSFET

## N-Channel Enhancement Mode

**DESCRIPTION:**

The **VFT5-28SL** is Designed for Class A and AB VHF Power Amplifiers operating at frequencies up to 250 MHz.

**FEATURES:**

- $P_G = 21$  dB Typical at 175 MHz
- $h_D = 50\%$  Typical at  $P_{OUT} = 5$  Watts
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_D$	1.25 A
$V_{DSS}$	60 V
$V_{DGR}$	60 V
$V_{GS}$	$\pm 40$ 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 $+150^\circ C$
$q_{JC}$	$10^\circ C/W$

**PACKAGE STYLE .280 4L PILL**

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B		1.055 / 26.80
C	.275 / 6.99	.285 / 7.24
D	.004 / 0.10	.006 / 0.15
E	.050 / 1.27	.060 / 1.52
F	.118 / 3.00	.130 / 3.30

**ORDER CODE: ASI10701**

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

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
$V_{(BR)DSS}$	$V_{GS} = 0$ V	$I_{DS} = 5$ mA		60			V
$I_{DSS}$	$V_{DS} = 28$ V	$V_{GS} = 0$ V				0.8	mA
$I_{GSS}$	$V_{DS} = 0$ V	$V_{GS} = 20$ V				1.0	mA
$V_{GS(TH)}$	$V_{DS} = 10$ V	$I_D = 10$ mA		1.0	---	6.0	V
$G_{FS}$	$V_{GS} = 10$ V	$I_D = 250$ mA		110			mS
$C_{iss}$ $C_{oss}$ $C_{rss}$	$V_{DS} = 28$ V	$V_{GS} = 0$ V	$F = 1.0$ MHz	---	8.5 6.5 5.5	---	pF
$G_{PS}$ $h_D$	$V_{DD} = 28$ V $F = 175$ MHz	$I_{DQ} = 50$ mA	$P_{OUT} = 5$ W	20 45	21		dB %