

# VHF POWER MOSFET

## Silicon N-Channel Enhancement Mode

**DESCRIPTION:**

The **VFT300-28** is Designed for Wideband High Power VHF Amplifier Applications operating up to 250 MHz.

**FEATURES:**

- $P_G = 14$  dB Typical at 175 MHz
- $h_D = 55\%$  Typ. at  $P_{OUT} = 300$  Watts
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_D$	16 A
$V_{(BR)DSS}$	65 V
$V_{DGR}$	65 V
$V_{GS}$	$\pm 40$ V
$P_{DISS}$	300 W @ $T_C = 25^\circ C$
$T_J$	$-65^\circ C$ to $+200^\circ C$
$T_{STG}$	$-65^\circ C$ to $+150^\circ C$
$q_{JC}$	$0.6^\circ C/W$

**PACKAGE STYLE .400 BAL FLG (D)**

Sources are connected to flange

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.210 / 5.33	
C	.125 / 3.18	
D	.380 / 9.65	.390 / 9.91
E	.580 / 14.73	.620 / 15.75
F	.435 / 11.05	
G	1.090 / 27.69	1.105 / 28.07
H	1.335 / 33.91	1.345 / 34.16
I	.003 / 0.08	.007 / 0.18
J	.060 / 1.52	.070 / 1.78
K	.100 / 2.54	.115 / 2.92
L	.230 / 5.84	
M	.395 / 10.03	.407 / 10.34
N	.850 / 21.59	.870 / 22.10

**ORDER CODE: ASI10707**

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

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
$V_{(BR)DSS}$	$V_{GS} = 0$ V	$I_{DS} = 100$ mA		65			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
$V_{GS}$	$V_{DS} = 10$ V	$I_D = 100$ mA		1.0		5.0	V
$V_{DS}$	$V_{GS} = 10$ V	$I_D = 10$ A				1.5	V
$G_{FS}$	$V_{DS} = 10$ V	$I_D = 5$ A		3500			mS
$C_{iss}$ $C_{oss}$ $C_{rss}$	$V_{GS} = 28$ V	$V_{DS} = 0$ V	$F = 1.0$ MHz		375 188 26		pF
$G_{PS}$ $h_D$	$V_{DD} = 28$ V $f = 175$ MHz	$I_{DQ} = 2 \times 250$ mA	$P_{OUT} = 300$ W	12 50	14 55		dB %



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