

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}	± 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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