VFT30-50

VHF POWER MOSFET

N-Channel Enhancement Mode

DESCRIPTION:

The **VFT30-50** is Designed for General Purpose Class B Power Amplifier Applications up to 250 MHz.

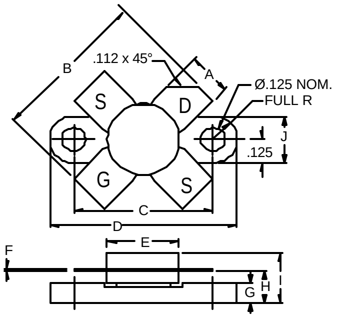
FEATURES:

- P_G = 16 dB Typ. at 30 W /175 MHz
- η_D = 60% Typ. at 30 W /175 MHz
- ***Omnigold***™ Metalization System

MAXIMUM RATINGS

I_D	6.0 A
$V_{(BR)DSS}$	120 V
V_{DGR}	120 V
V_{GS}	± 40 V
P_{DISS}	115 W @ T_C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	1.52 °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: ASI10708

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$V_{(BR)DSS}$	V_{GS} = 0 V I_{DS} = 10 mA	125	---	---	**V**
I_{DSS}	V_{GS} = 0 V V_{DS} = 50 V	---	---	1.0	**mA**
I_{GSS}	V_{GS} = 20 V V_{DS} = 0 V	---	---	100	**µA**
V_{GS}	V_{DS} = 10 V I_D = 10 mA	1.0	---	5.0	**V**
G_{FS}	V_{GS} = 10 V I_D = 2.5 A	800	---	---	**mS**
C_{iss} **C_{oss}** **C_{rss}**	V_{GS} = 50 V V_{DS} = 0 V F = 1.0 MHz		115 30.0 6.5		**pF**
P_G **η_D**	V_{DD} = 50 V I_{DQ} = 100 mA P_{OUT} = 30 W f = 175 MHz	15 50	16 60		**dB** **%**