

# HF POWER MOSFET

## N-Channel Enhancement Mode

**DESCRIPTION:**

The **HFT150-50** is Designed for General Purpose Class B Power Amplifier Applications Up to 100 MHz.

**FEATURES:**

- $P_G = 20$  dB Typ. at 150 W/30 MHz
- $h_D = 50\%$  Typical at 150 W/30 MHz
- *Omnigold™* Metalization

**MAXIMUM RATINGS**

$I_D$	16 A
$V_{DSS}$	125 V
$V_{GS}$	$\pm 30$ 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 .500 4L FLG**

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.125 / 3.18	
C	.245 / 6.22	.255 / 6.48
D	.720 / 18.28	.730 / 18.54
E	.125 / 3.18	
F	.970 / 24.64	.980 / 24.89
G	.495 / 12.57	.505 / 12.83
H	.003 / 0.08	.007 / 0.18
I	.090 / 2.29	.110 / 2.79
J	.150 / 3.81	.175 / 4.45
K	.280 / 7.11	
L	.980 / 24.89	1.050 / 26.67

**ORDER CODE: ASI10617**

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$V_{(BR)DSS}$	$I_D = 50$ mA $V_{GS} = 0$ V	125			V
$I_{DSS}$	$V_{DSS} = 50$ V $V_{GS} = 0$ V			5.0	mA
$I_{GSS}$	$V_{GS} = 20$ V $V_{DS} = 0$ V			1.0	mA
$V_{GS(th)}$	$V_{DS} = 10$ V $I_D = 100$ mA	1.0		5.0	V
$g_{fs}$	$V_{DS} = 10$ V $I_D = 5.0$ A	3.5			S
$C_{iss}$ $C_{oss}$ $C_{rss}$	$V_{DS} = 50$ V $V_{GS} = 0$ V $f = 1.0$ MHz		300 150 30		pF
$G_{ps}$ $h_D$ $y$	$V_{DD} = 50$ V $I_{BQ} = 250$ mA $P_{OUT} = 150W$ (PEP) $F_o = 30$ & $30.001$ MHz VSWR 30:1 @ all phase angles	16 45	20 50		dB %
NO DEGRADATION IN OUTPUT POWER					