

VHF POWER MOSFET

N-Channel Enhancement Mode

DESCRIPTION:

The **VFT15-12** is Designed for General Purpose Class B Power Amplifier Applications up to 175 MHz.

FEATURES:

- $P_G = 12$ dB Typ. at 15 W /175MHz
- 20:1 Load VSWR Capability
- *Omnigold*TM Metalization System

MAXIMUM RATINGS

I_D	5.0 A
$V_{(BR)DSS}$	40 V
V_{DGR}	40 V
V_{GS}	± 20 V
P_{DISS}	95 W @ $T_C = 25^\circ C$
T_J	$-65^\circ C$ to $+200^\circ C$
T_{STG}	$-65^\circ C$ to $+150^\circ C$
θ_{JC}	1.8 $^\circ C/W$

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: ASI10845

CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
$V_{(BR)DSS}$	$V_{GS} = 0$ V	$I_{DS} = 5$ mA		40	---	---	V
I_{DSS}	$V_{DS} = 15$ V	$V_{GS} = 0$ V		---	---	2.0	mA
I_{GSS}	$V_{DS} = 0$ V	$V_{GS} = 20$ V		---	---	1.0	μA
V_{GS}	$V_{DS} = 10$ V	$I_D = 25$ mA		1.0	---	6.0	V
G_{FS}	$V_{DS} = 10$ V	$I_D = 1.0$ A		500	---	---	mS
C_{iss} C_{oss} C_{rss}	$V_{GS} = 15$ V	$V_{DS} = 0$ V	$F = 1.0$ MHz		45 45 10		pF
P_G η_D	$V_{DD} = 12.5$ V $F = 175$ MHz	$I_{DQ} = 25$ mA	$P_{OUT} = 15$ W	10 60	12 65		dB %