

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The ASI HF50-12S is Designed for

FEATURES:

- $P_G = 16$ dB min. at 50 W/30 MHz
- $IMD_3 = -30$ dBc max. at 50 W(PEP)
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	12.0 A
V_{CBO}	36 V
V_{CEO}	18 V
V_{EBO}	3.5 V
P_{DISS}	183 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}	$1.05^\circ C/W$

PACKAGE STYLE .380 4L STUD

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.980 / 24.89	
C	.370 / 9.40	.385 / 9.78
D	.004 / 0.10	.007 / 0.18
E	.320 / 8.13	.330 / 8.38
F	.100 / 2.54	.130 / 3.30
G	.450 / 11.43	.490 / 12.45
H	.090 / 2.29	.100 / 2.54
I	.155 / 3.94	.175 / 4.45
J		.750 / 19.05

ORDER CODE: ASI10597

CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 50$ mA	36			V
BV_{CES}	$I_C = 100$ mA	36			V
BV_{CEO}	$I_C = 50$ mA	18			V
BV_{EBO}	$I_E = 10$ mA	3.5			V
I_{CES}	$V_{CE} = 15$ V			10	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 5.0$ A	10		---	---
C_{OB}	$V_{CB} = 12.5$ V $f = 1.0$ MHz			300	pF
G_p	$V_{CE} = 12.5$ V $P_{IN} = 7$ W $f = 50$ MHz	10			dB
h_c	$P_{OUT} = 50$ W(PEP)		55		%