

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI HF75-50F** is 50 V Class AB NPN Power transistor, designed for SSB & VHF Communications.

FEATURES:

- $P_G = 14$ dB min. at 75 W/30 MHz
- $IMD_3 = 50$ dBc max. at 75 W(PEP)
- **Omnigold™** Metalization System
- 50 V Operation

MAXIMUM RATINGS

I_C	3.25 A
V_{CB0}	110 V
V_{CE0}	55 V
V_{EBO}	4.0 V
P_{DISS}	127 W @ $T_C = 25^\circ C$
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	2.0 °C/W

PACKAGE STYLE .500 4L FLG

	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	.160/4.06	.175/4.45
K		.280/7.11
L		1.050/26.67

1 = COLLECTOR 2 = BASE
3 & 4 EMITTER

ORDER CODE: ASI10610

CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	$I_C = 100$ mA	110			V
BV_{CE0}	$I_C = 200$ mA	55			V
BV_{EBO}	$I_E = 10$ mA	4.0			V
h_{FE}	$V_{CE} = 6.0$ V $I_C = 1.4$ A	19	---	50	---
C_{ob}	$V_{CB} = 50$ V $f = 1.0$ MHz			100	pF
G_P		14	---	-30	dB
IMD_3	$V_{CE} = 50$ V $P_{IN} = 3.0$ W $P_{OUT} = 75$ W(PEP)	---	---	-30	dBc
η_c	$f_1 = 30.000$ MHz, $f_2 = 30.001$ MHz	37			%