

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI HF150-50S** is a 50 V epitaxial transistor designed for SSB communications. The device utilizes emitter ballasting for ruggedness.

FEATURES:

- $P_G = 14$ dB min. at 150 W/30 MHz
- $IMD_3 = 100$ dBc max. at 150 W(PEP)
- **Omnigold™** Metalization System
- Common Emitter configuration

MAXIMUM RATINGS

I_C	10 A
V_{CBO}	110 V
V_{EBO}	4.0 V
V_{CEO}	55 V
P_{DISS}	233 W @ $T_C = 25$ °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	0.75 °C/W

PACKAGE STYLE .500 4L STUD (A)

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B		1.050 / 26.67
C	.545 / 13.84	.555 / 14.10
D	.495 / 12.57	.505 / 12.83
E	.003 / 0.08	.007 / 0.18
F		.830 / 21.08
G	.185 / 4.70	.198 / 5.03
H	.497 / 12.62	.530 / 13.46

ORDER CODE: ASI10613

CHARACTERISTICS $T_C = 25$ °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 100$ mA	110			V
BV_{CES}	$I_C = 100$ mA	110			V
BV_{CEO}	$I_C = 100$ mA	55			V
BV_{EBO}	$I_E = 10$ mA	4.0			V
I_{CEO}	$V_{CE} = 30$ V			5	mA
I_{CES}	$V_E = 60$ V			5	mA
h_{FE}	$V_{CE} = 6$ V $I_C = 1.4$ A	18		43.5	---
C_{ob}	$V_{CB} = 50$ V $f = 1.0$ MHz			220	pF
G_p		14			dB
IMD_3	$V_{CE} = 50$ V $I_{CQ} = 100$ mA $P_{OUT} = 150$ W(PEP)			-30	dBc
η_c	$f_1 = 30.000$ MHz $f_2 = 30.001$ MHz	37			%