

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI HF30-28F** is a 28 V epitaxial RF NPN planar transistor designed primarily for SSB communications. The device utilizes emitter ballasting for improved ruggedness and reliability.

FEATURES:

- $P_G = 18$ dB min. at 30 W/30 MHz
- $IMD_3 = -30$ dBc max. at 30 W(PEP)
- **Omnigold™** Metalization System
- $P_{OUT} 30$ W @ 30 MHz

MAXIMUM RATINGS

I_C	4.5 A
V_{CBO}	65 V
V_{CEO}	36 V
V_{EBO}	4.0 V
P_{DISS}	80 W @ $T_C = 25$ °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	2.2 °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: ASI10604

CHARACTERISTICS $T_C = 25$ °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 200$ mA	65			V
BV_{CES}	$I_C = 200$ mA	65			V
BV_{CEO}	$I_C = 200$ mA	35			V
BV_{EBO}	$I_E = 10$ mA	4.0			V
I_{CBO}	$V_{CB} = 30$ V			1.0	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 500$ mA	10		200	---
C_{OB}	$V_{CB} = 30$ V $f = 1.0$ MHz			65	pF



G_P	V _{CE} = 28 V	P _{IN} = 0.48 W	f = 30 MHz	18			dB
η_c				60			%
IMD₃	I _{CQ} = 25 Ma	P _{OUT} = 30 W				-28	dBc