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.

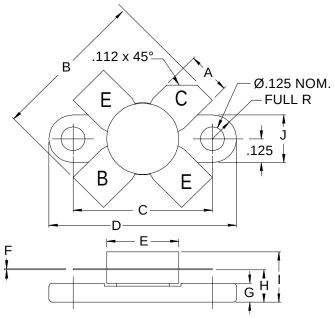
FEATURES:

- **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 I_{CQ} = 25 Ma P_{OUT} = 30 W	18			**dB**
η_C		60			**%**
IMD_3				-28	**dBc**