

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

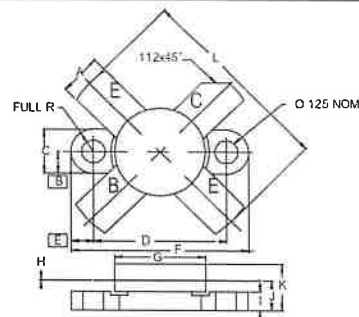
The **ASI SD1407F** is a common Emitter Transistor Designed for broadband amplifier applications in the HF and VHF bands.

FEATURES:

- $P_G = 15$ dB min. at 125 W/30 MHz
- $IMD_3 = -30$ dBc max. At 125 W_(PEP)
- **Omnigold™** Metallization System
- RoHS compliant

MAXIMUM RATINGS

I_C	20 A
V_{CBO}	65 V
V_{CEO}	36 V
V_{EBO}	4.0 V
P_{DISS}	270 W @ $T_C = 25$ °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	0.65 °C/W

PACKAGE STYLE .500 4L FLG


DIM	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	7 30 / 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	150 / 3 81	175 / 4 45
K		280 / 7 11
L	980 / 24 89	1 050 / 26 67

CHARACTERISTICS $T_C = 25$ °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 100$ mA	35			V
BV_{CES}	$I_C = 100$ mA	65			V
BV_{CBO}	$I_C = 100$ mA	65			
BV_{EBO}	$I_E = 10$ mA	4.0			V
I_{CES}	$V_{CE} = 30$ V			15	mA
h_{FE}	$V_{CE} = 10$ V $I_C = 0.3$ A	30		200	---
C_{ob}	$V_{CB} = 30$ V $f = 1.0$ MHz	---	250	---	pF
G_P	$V_{CE} = 28$ V $P_{IN} = 3.95$ W $f = 30$ MHz $I_{CQ} = 100$ mA	15	16		dB
IMD_3			-34	-30	dBc
P_{OUT}		125			W