

# 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.

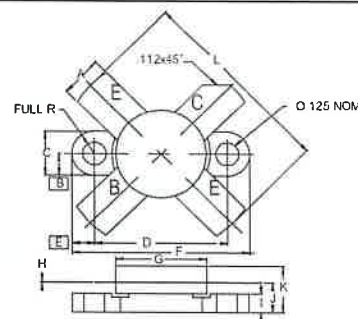
## FEATURES:

- $P_G = 15$  dB min. at 125 W/30 MHz
- $IMD_3 = -30$  dBc max. At 125 W<sub>(PEP)</sub>
- **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 @ $T_C = 25^\circ C$
$T_J$	$-65^\circ C$ to $+200^\circ C$
$T_{STG}$	$-65^\circ C$ to $+150^\circ C$
$\theta_{JC}$	0.65 $^\circ C/W$

## 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	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	.150 / 3.81	.175 / 4.45
K		.280 / 7.11
L	.980 / 24.89	1.050 / 26.67

## CHARACTERISTICS $T_C = 25^\circ C$

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			V
$BV_{EBO}$	$I_E = 10$ 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	15	16		dB
$IMD_3$	$I_{CQ} = 100$ mA		-34	-30	dBc
$P_{OUT}$		125			W

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Advanced Semiconductor, Inc.:](#)

[SD1407F](#)