

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI SD1414** is Designed for FM Land Mobile Applications up to 836 MHz.

FEATURES:

- Internal Input Matching Network
- $P_G = 5.0$ dB at 45 W/836 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	9.0 A
V_{CB0}	36 V
V_{CEO}	18 V
V_{CES}	36 V
V_{EBO}	4.0 V
P_{DISS}	150 W @ $T_C = 25$ °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	1.2 °C/W

PACKAGE STYLE .230 6L FLG

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.355 / 9.02	.365 / 9.27
B	.115 / 2.92	.125 / 3.18
C	.075 / 1.91	.085 / 2.16
D	.225 / 5.72	.235 / 5.97
E	.090 / 2.29	.110 / 2.79
F	.720 / 18.29	.730 / 18.54
G	.970 / 24.64	.980 / 24.89
H	.355 / 9.02	.365 / 9.27
I	.004 / 0.10	.006 / 0.15
J	.120 / 3.05	.130 / 3.30
K	.160 / 4.06	.180 / 4.57
L	.230 / 5.84	.260 / 6.60

CHARACTERISTICS $T_C = 25$ °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 50$ mA	36			V
BV_{CES}	$I_C = 50$ mA $R_{BE} = 10$ Ω	18			V
BV_{EBO}	$I_E = 10$ mA	4.0			V
I_{CB0}	$V_{CB} = 15$ V			5.0	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 1.0$ A	5.0		200	---
C_{OB}	$V_{CB} = 12.5$ V $f = 1.0$ MHz		80		pF
P_G η_C	$V_{CE} = 12.5$ V $P_{OUT} = 45$ W $f = 836$ MHz	4.7	35		dB %