

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI SD1169** is a Common Emitter Device Designed for Class C Amplifier Applications in HF Land Mobile Radios.

**FEATURES INCLUDE:**

- Aluminum Metalization
- Emitter Ballasting

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	6 A
<b>V<sub>CB</sub></b>	36 V
<b>P<sub>DISS</sub></b>	80 W @ T <sub>C</sub> = 25 °C
<b>T<sub>J</sub></b>	-65 °C to +200 °C
<b>T<sub>STG</sub></b>	-65 °C to +150 °C
<b>q<sub>JC</sub></b>	2.2 °C/W

**PACKAGE STYLE .500 4L STUD**

	MINIMUM Inches/mm	MAXIMUM Inches/mm
A	1.010/25,65	1.050/26,67
B	.220/5,59	.230/5,84
C	.495/12,57	.505/12,83
D	.003/0,08	.007/0,18
E	.160/4,06	.180/4,57
F	.622/15,80	
G	.100/2,54	.130/3,31
H	.415/10,54	.425/10,80
I	.720/18,29	
J	.250/6,35	.290/7,37

1 = COLLECTOR    2 & 4 = EMITTER  
3 = BASE

**CHARACTERISTICS** T<sub>C</sub> = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 100mA	18			V
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 50mA	36			V
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 10mA	4.0			V
<b>I<sub>CB0</sub></b>	V <sub>CB</sub> = 15 V			5	mA
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V    I <sub>C</sub> = 1.0 A	5			—
<b>C<sub>OB</sub></b>	V <sub>CB</sub> = 12.5 V    f = 1.0 MHz			200	pF
<b>G<sub>PE</sub></b> <b>h<sub>C</sub></b>	V <sub>CE</sub> = 12.5 V    P <sub>OUT</sub> = 40 W    f = 88 MHz	6.0	7.5 65		dB %