

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI 2N3375** is Designed for Class A,B,C Amplifier, Oscillator and Driver Applications Covering the VHF-UHF Region.

**FEATURES INCLUDE:**

- Isolated Package

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	1.5 A
<b>V<sub>CE</sub></b>	40 V
<b>P<sub>DISS</sub></b>	11.6 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 +200 °C
<b>θ<sub>JC</sub></b>	15 °C/W

**PACKAGE STYLE TO-60 (ISOLATED)**

	MINIMUM Inches/mm	MAXIMUM Inches/mm
A	.090/2,29	.110/2,79
B	.185/4,70	.215/5,46
C	.420/10,67	.440/11,18
D	.030/0,76	.046/1,17
E	.320/8,13	.360/9,14
F	.090/2,29	.135/3,43
G	.215/5,46	.320/8,13
H		.480/12,19
I	.420/10,67	.455/11,56

1 = EMITTER    2 = BASE  
3 = COLLECTOR

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 200 mA	40			V
<b>BV<sub>CEX</sub></b>	V <sub>BE</sub> = -1.5 V    I <sub>C</sub> = 100 mA	65			V
<b>BV<sub>CBO</sub></b>	I <sub>C</sub> = 500 μA	65			V
<b>I<sub>CEO</sub></b>	V <sub>CE</sub> = 30 V			100	μA
<b>I<sub>EBO</sub></b>	V <sub>EB</sub> = 4.0 V			100	μA
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V    I <sub>C</sub> = 250 mA	10			---
<b>V<sub>CE(SAT)</sub></b>	I <sub>C</sub> = 500 mA    I <sub>B</sub> = 100 mA			1.0	V
<b>C<sub>ob</sub></b>	V <sub>CB</sub> = 30 V    f = 1.0 MHz			10	pF
<b>f<sub>t</sub></b>	V <sub>CE</sub> = 28 V    I <sub>C</sub> = 150 mA    f = 100 MHz		500		MHz
<b>P<sub>out</sub></b>	V <sub>CE</sub> = 28 V    P <sub>in</sub> = 1.0 W    f = 400 MHz	3.0			W
<b>G<sub>p</sub></b>	V <sub>CE</sub> = 28 V    P <sub>in</sub> = 1.0 W    f = 400 MHz	4.8			dB
<b>η</b>	V <sub>CE</sub> = 28 V    P <sub>in</sub> = 1.0 W    f = 400 MHz	40			%