

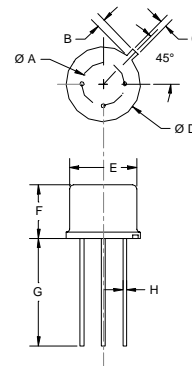
# NPN SILICON HIGH FREQUENCY TRANSISTOR

**DESCRIPTION:**

The **ASILT1001A** is a High Frequency Transistor Designed for High Gain Low Noise CATV, and MATV Amplifier Applications.

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	200 mA
<b>V<sub>CE</sub></b>	20 V
<b>P<sub>DISS</sub></b>	2.5 W @ T <sub>C</sub> = 50 °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>	70 °C/W

**PACKAGE STYLE TO-39**


DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.200 / 5.080	
B	.029 / 0.740	.045 / 1.140
C	.028 / 0.720	.034 / 0.860
D	.335 / 8.510	.370 / 9.370
E	.305 / 7.750	.335 / 8.500
F	.240 / 6.100	.260 / 6.600
G	.500 / 12.700	
H	.016 / 0.407	.020 / 0.508

1 = EMITTER    2 = BASE  
3 = COLLECTOR(CASE)

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

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 5.0 mA			20			<b>V</b>
<b>BV<sub>CBO</sub></b>	I <sub>C</sub> = 1.0 mA			40			<b>V</b>
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 100 μA			3.5			<b>V</b>
<b>I<sub>CBO</sub></b>	V <sub>CB</sub> = 10 V					50	<b>μA</b>
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V	I <sub>C</sub> = 50 mA		70		300	<b>---</b>
<b>V<sub>CE(SAT)</sub></b>	I <sub>C</sub> = 50 mA	I <sub>B</sub> = 5.0 mA			500		<b>mV</b>
<b>f<sub>t</sub></b>	V <sub>CE</sub> = 14 V	I <sub>C</sub> = 90 mA	f = 300 MHz		3.0		<b>GHz</b>
<b>C<sub>cb</sub></b>	V <sub>CB</sub> = 10 V	f = 1.0 MHz				1.6	<b>pF</b>
<b>NF</b>	V <sub>CE</sub> = 8.0 V	I <sub>C</sub> = 50 mA	f = 300 MHz		2.5		<b>dB</b>
<b>G<sub>Umax</sub></b>	V <sub>CE</sub> = 14 V	I <sub>C</sub> = 90 mA	f = 300 MHz		15		<b>dB</b>