

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI VHB1-28T** is Designed for

**FEATURES:**

- 
- 
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	0.4 A
<b>V<sub>CB0</sub></b>	55 V
<b>V<sub>CEO</sub></b>	30 V
<b>V<sub>EBO</sub></b>	3.5 V
<b>P<sub>DISS</sub></b>	5 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>	35 °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

**ORDER CODE: ASI10720**

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 5.0 mA	30			<b>V</b>
<b>BV<sub>CER</sub></b>	I <sub>C</sub> = 5.0 mA      R <sub>BE</sub> = 10 Ω	55			<b>V</b>
<b>BV<sub>CB0</sub></b>	I <sub>C</sub> = 0.1 mA	55			<b>V</b>
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 0.1 mA	3.5			<b>V</b>
<b>I<sub>CEX</sub></b>	V <sub>C</sub> = 55 V      V <sub>BE</sub> = -1.5 V			100	<b>μA</b>
<b>I<sub>CEO</sub></b>	V <sub>E</sub> = 28 V			20	<b>μA</b>
<b>V<sub>CE</sub><sup>(S)</sup></b>	I <sub>C</sub> = 100 mA      I <sub>B</sub> = 20 mA			1.0	<b>V</b>
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V      I <sub>C</sub> = 50 mA I <sub>C</sub> = 360 mA	10 5.0		200	<b>---</b>
<b>C<sub>OB</sub></b>	V <sub>CB</sub> = 28 V      f = 1.0 MHz			3.0	<b>pF</b>
<b>P<sub>G</sub></b> <b>η</b>	V <sub>CE</sub> = 28 V      P <sub>OUT</sub> = 1.0 W      f = 175 MHz	13	60		<b>dB</b> <b>%</b>