

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The ASI VHB50-28S is Designed for

**FEATURES:**

- 
- 
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	6.5 A
<b>V<sub>CB0</sub></b>	65 V
<b>V<sub>CEO</sub></b>	35 V
<b>V<sub>EBO</sub></b>	4.0 V
<b>P<sub>DISS</sub></b>	75 W
<b>T<sub>J</sub></b>	-65 °C to +200 °C
<b>T<sub>STG</sub></b>	-65 °C to +150 °C
<b>θ<sub>JC</sub></b>	2.3 °C/W

**PACKAGE STYLE .380 4L STUD**

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.980 / 24.89	
C	.370 / 9.40	.385 / 9.78
D	.004 / 0.10	.007 / 0.18
E	.320 / 8.13	.330 / 8.38
F	.100 / 2.54	.130 / 3.30
G	.450 / 11.43	.490 / 12.45
H	.090 / 2.29	.100 / 2.54
I	.155 / 3.94	.175 / 4.45
J		.750 / 19.05

**ORDER CODE: ASI10730**

**CHARACTERISTICS**  $T_C = 25\text{ }^\circ\text{C}$ 

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 200 mA			35			<b>V</b>
<b>BV<sub>CES</sub></b>	I <sub>C</sub> = 200 mA			65			<b>V</b>
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 10 mA			4.0			<b>V</b>
<b>I<sub>CB0</sub></b>	V <sub>CB</sub> = 28 V					2.0	<b>mA</b>
<b>I<sub>CES</sub></b>	V <sub>CE</sub> = 28 V $T_C = 125\text{ }^\circ\text{C}$					10	<b>mA</b>
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V	I <sub>C</sub> = 500 mA		5.0		---	---
<b>C<sub>ob</sub></b>	V <sub>CB</sub> = 28 V	f = 1.0 MHz				80	<b>pF</b>
<b>f<sub>T</sub></b>	V <sub>CE</sub> = 10 V	I <sub>C</sub> = 500 mA	f = 100 MHz	200			<b>MHz</b>
<b>P<sub>G</sub></b>	V <sub>CE</sub> = 28 V	P <sub>OUT</sub> = 50 W	f = 150 MHz	6.0			<b>dB</b>
<b>η<sub>C</sub></b>					60		<b>%</b>