

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The ASI VHB100-12 is Designed for

**FEATURES:**

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- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	20 A
<b>V<sub>CB0</sub></b>	36 V
<b>V<sub>CEO</sub></b>	18 V
<b>V<sub>CES</sub></b>	36 V
<b>V<sub>EBO</sub></b>	4.0 V
<b>P<sub>DISS</sub></b>	270 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>θ<sub>JC</sub></b>	0.65 °C/W

**PACKAGE STYLE .500 6L FLG**

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.150 / 3.43	.160 / 4.06
B	.045 / 1.14	
C	.210 / 5.33	.220 / 5.59
D	.835 / 21.21	.865 / 21.97
E	.200 / 5.08	.210 / 5.33
F	.490 / 12.45	.510 / 12.95
G	.003 / 0.08	.007 / 0.18
H	.125 / 3.18	
I	.725 / 18.42	
J	.970 / 24.64	.980 / 24.89
K	.090 / 2.29	.105 / 2.67
L	.150 / 3.81	.170 / 4.32
M	.285 / 7.24	
N	.120 / 3.05	.135 / 3.43

**ORDER CODE: ASI10719**

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 100 mA	18			<b>V</b>
<b>BV<sub>CES</sub></b>	I <sub>C</sub> = 100 mA	36			<b>V</b>
<b>BV<sub>CB0</sub></b>	I <sub>C</sub> = 50 mA	36			<b>V</b>
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 10 mA	4.0			<b>V</b>
<b>I<sub>CES</sub></b>	V <sub>CE</sub> = 12.5 V			15	<b>mA</b>
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V      I <sub>C</sub> = 5.0 A	10			<b>---</b>
<b>C<sub>OB</sub></b>	V <sub>CB</sub> = 12.5 V      f = 1.0 MHz			420	<b>pF</b>
<b>P<sub>G</sub></b> <b>η<sub>C</sub></b>	V <sub>CC</sub> = 12.5 V      P <sub>OUT</sub> = 100 W      f = 175 MHz	6.0	60		<b>dB</b> <b>%</b>