

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The ASI VLB100-12 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>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 4L FLG**

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.125 / 3.18	
C	.245 / 6.22	.255 / 6.48
D	.720 / 18.28	.730 / 18.54
E	.125 / 3.18	
F	.970 / 24.64	.980 / 24.89
G	.495 / 12.57	.505 / 12.83
H	.003 / 0.08	.007 / 0.18
I	.090 / 2.29	.110 / 2.79
J	.150 / 3.81	.175 / 4.45
K	.280 / 7.11	
L	.980 / 24.89	1.050 / 26.67

**ORDER CODE: ASI10740**

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CB0</sub></b>	I <sub>C</sub> = 50 mA	36			V
<b>BV<sub>CES</sub></b>	I <sub>C</sub> = 100 mA	36			V
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 100 mA	18			V
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 10 mA	4.0			V
<b>I<sub>CES</sub></b>	V <sub>CE</sub> = 12.5 V			15	mA
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V      I <sub>C</sub> = 5.0 A	20		---	---
<b>C<sub>OB</sub></b>	V <sub>CB</sub> = 12.5 V      f = 1.0 MHz			400	pF
<b>P<sub>G</sub></b>	V <sub>CC</sub> = 12.5 V      P <sub>OUT</sub> = 100 W      f = 50 MHz	7.0			dB
<b>η<sub>C</sub></b>			60		%