# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

The **ASI VLB100-12** is Designed for

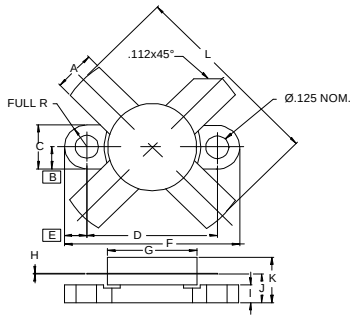
## FEATURES:

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- ***Omnigold***™ Metalization System

## MAXIMUM RATINGS

| | |
|---|---|
| $I_C$ | 20 A |
| $V_{CBO}$ | 36 V |
| $V_{CEO}$ | 18 V |
| $V_{EBO}$ | 4.0 V |
| $P_{DISS}$ | 270 W @ $T_C$ = 25 $^{O}$C |
| $T_J$ | -65 $^{O}$C to +200 $^{O}$C |
| $T_{STG}$ | -65 $^{O}$C to +150 $^{O}$C |
| $\theta_{JC}$ | 0.65 $^{O}$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 | .7.30 / 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 $T_C$ = 25 $^{O}$C

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|---|---|---|---|---|---|
| $BV_{CBO}$ | $I_C$ = 50 mA | 36 | | | V |
| $BV_{CES}$ | $I_C$ = 100 mA | 36 | | | V |
| BVCEO | $I_C$ = 100 mA | 18 | | | V |
| $BV_{EBO}$ | $I_E$ = 10 mA | 4.0 | | | V |
| $I_{CES}$ | $V_{CE}$ = 12.5 V | | | 15 | mA |
| $h_{FE}$ | $V_{CE}$ = 5.0 V $I_C$ = 5.0 A | 20 | | --- | --- |
| | | | | | |
| $C_{OB}$ | $V_{CB}$ = 12.5 V f = 1.0 MHz | | | 400 | pF |
| | | | | | |
| $P_G$ | $V_{CC}$ = 12.5 V $P_{OUT}$ = 100 W f = 50 MHz | 7.0 | | | dB |
| $\eta_C$ | | | 60 | | % |



*Specifications are subject to change without notice.*