

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

The **ASI CBSL30** is Designed for

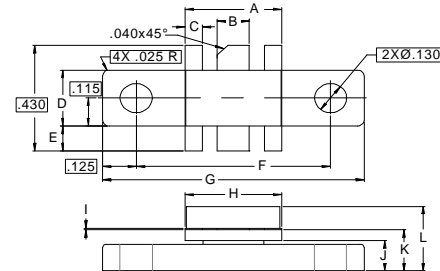
## FEATURES:

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- **Omnigold™** Metalization System

## MAXIMUM RATINGS

<b>I<sub>C</sub></b>	7.5 A
<b>V<sub>CBO</sub></b>	48V
<b>V<sub>CEO</sub></b>	25 V
<b>V<sub>EBO</sub></b>	3.5 V
<b>P<sub>DISS</sub></b>	88 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>	3.0 °C/W

## PACKAGE STYLE .230 6L FLG



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.355 / 9.02	.365 / 9.27
B	.115 / 2.92	.125 / 3.18
C	.075 / 1.91	.085 / 2.16
D	.225 / 5.72	.235 / 5.97
E	.090 / 2.29	.110 / 2.79
F	.720 / 18.29	.730 / 18.54
G	.970 / 24.64	.980 / 24.89
H	.355 / 9.02	.365 / 9.27
I	.004 / 0.10	.006 / 0.15
J	.120 / 3.05	.130 / 3.30
K	.160 / 4.06	.180 / 4.57
L	.230 / 5.84	.260 / 6.60

**ORDER CODE: ASI10582**

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CBO</sub></b>	I <sub>C</sub> = 100 mA	48	55	---	V
<b>BV<sub>CER</sub></b>	I <sub>C</sub> = 40 mA      R <sub>BE</sub> = 150 Ω	30	40	---	V
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 40 mA	25	28	---	
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 10 mA	3.5	5.0	---	V
<b>I<sub>CBO</sub></b>	V <sub>CE</sub> = 24 V	10	---	---	mA
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 20 V      I <sub>C</sub> = 2.0 A	15	40	100	---
<b>C<sub>OB</sub></b>	V <sub>CB</sub> = 25 V      f = 1.0 MHz			50	pF
<b>P<sub>G</sub></b>	V <sub>CE</sub> = 25 V      I <sub>CQ</sub> = 150 mA      f = 860 MHz	7.5		---	dB
<b>IMD<sub>3</sub></b>	P <sub>OUT</sub> = 30 W      f <sub>1</sub> = 860.0 MHz      f <sub>2</sub> = 860.1 MHz		-35		dBc
<b>VSWR<sub>1</sub></b>	V <sub>CE</sub> = 25 V      VSWR = 20:1 V <sub>CE</sub> = 25 V ± 20%      VSWR = 10:1	No Degradation in Output Device			Typ.
<b>VSWR<sub>2</sub></b>	V <sub>CE</sub> = 25 V ± 20%      VSWR = 5:1 P <sub>IN</sub> = P <sub>IN</sub> (norm) +3 dB	No Degradation in Output Device			Typ.
<b>OVD</b>	V <sub>CE</sub> = 25 V      P <sub>IN</sub> (norm) = +5 Db V <sub>CE</sub> = 25 V ± 20%      P <sub>IN</sub> (norm) = +3 dB	No Degradation in Output Device			Typ.