

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI CBSL30** is Designed for Class AB, Cellular Base Station Applications up to 960 MHz.

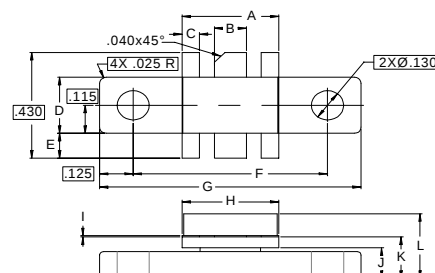
FEATURES:

- Internal Input Matching Network
- $P_G = 7.5$ dB at 30 W/960 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	7.5 A
V_{CBO}	48V
V_{CEO}	25 V
V_{EBO}	3.5 V
P_{DISS}	58 W @ $T_C = 25^\circ C$
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	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 $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 100$ Ma	48	55	---	V
BV_{CER}	$I_C = 40$ mA $R_{BE} = 150 \Omega$	30	40	---	V
BV_{CEO}	$I_C = 40$ mA	25	28	---	V
BV_{EBO}	$I_E = 10$ mA	3.5	5.0	---	V
I_{CBO}	$V_{CE} = 24$ V	10	---	---	mA
h_{FE}	$V_{CE} = 20$ V $I_C = 2.0$ A	15	40	100	---
C_{OB}	$V_{CB} = 25$ V $f = 1.0$ MHz			50	pF
P_G IMD_3	$V_{CE} = 25$ V $I_{CQ} = 150$ mA $f = 860$ MHz $P_{OUT} = 30$ W $f_1 = 860.0$ MHz $f_2 = 860.1$ MHz	7.5	-35	---	dB dBc
$VSWR_1$	$V_{CE} = 25$ V $VSWR = 20:1$ $V_{CE} = 25$ V $\pm 20\%$ $VSWR = 10:1$	No Degradation in Output Device			Typ.
$VSWR_2$	$V_{CE} = 25$ V $\pm 20\%$ $VSWR = 5:1$ $P_{IN} = P_{IN} (norm) + 3$ dB	No Degradation in Output Device			Typ.
OVD	$V_{CE} = 25$ V $P_{IN} (norm) = +5$ dB $V_{CE} = 25$ V $\pm 20\%$ $P_{IN} (norm) = +3$ dB	No Degradation in Output Device			Typ.