NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

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

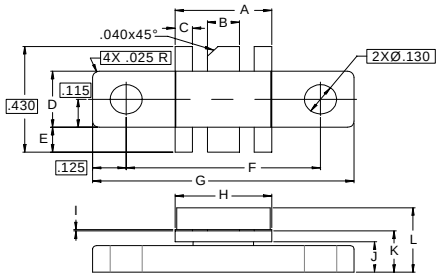
FEATURES:

- 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 °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 °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 Ω	30	40	---	V
BV_{CEO}	I_C = 40 mA	25	28	---	
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	V_{CE} = 25 V I_{CQ} = 150 mA f = 860 MHz	7.5		---	dB
IMD_3	P_{OUT} = 30 W f_1 = 860.0 MHz f_2 = 860.1 MHz		-35		dBc
$VSWR_1$	V_{CE} = 25 V VSWR = 20:1 V_{CE} = 25 V ± 20% VSWR = 10:1	No Degradation in Output Device			Typ.
$VSWR_2$	V_{CE} = 25 V ± 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 ± 20% P_{IN} (norm) = +3 dB	No Degradation in Output Device			Typ.