

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI CBSL15** is Designed for Class AB, Cellular Base Station Applications up to 960 MHz.

**FEATURES:**

- Internal Input Matching Network
- $P_G = 8.0$  dB at 15 W/960 MHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	2.5 A
$V_{CBO}$	48 V
$V_{CEO}$	30 V
$V_{EBO}$	4.0 V
$P_{DISS}$	29 W @ $T_C = 25$ °C
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +150 °C
$\theta_{JC}$	6.0 °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: ASI10581**

**CHARACTERISTICS**  $T_C = 25^\circ\text{C}$ 

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CBO}$	$I_C = 50$ mA	48			V
$BV_{CEO}$	$I_C = 20$ mA	25			V
$BV_{EBO}$	$I_E = 5$ mA	3.5	4.0	---	V
$I_{CBO}$	$V_{CB} = 24$ V			1.0	mA
$h_{FE}$	$V_{CE} = 10$ V $I_C = 100$ mA	20		100	---
$C_{OB}$	$V_{CB} = 24$ V $f = 1.0$ MHz			25	pF
$P_G$	$V_{CC} = 24$ V $I_{CQ} = 75$ mA $f = 960$ MHz	8.0			dB
$\eta_C$	$P_{OUT} = 15$ W		50		%