

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI CBSL1SL** is Designed for Class A, Cellular Base Station Applications up to 960 MHz.

**FEATURES:**

- Class A Operation
- $P_G = 10$  dB at 1.0 W/960 MHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	0.250 A
$V_{CBO}$	40 V
$V_{CEO}$	28 V
$V_{EBO}$	3.5 V
$P_{DISS}$	7.0 W @ $T_C = 25^\circ\text{C}$
$T_J$	$-65^\circ\text{C}$ to $+200^\circ\text{C}$
$T_{STG}$	$-65^\circ\text{C}$ to $+150^\circ\text{C}$
$\theta_{JC}$	$25^\circ\text{C/W}$

**PACKAGE STYLE .280 4L PILL**

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B		1.055 / 26.80
C	.275 / 6.99	.285 / 7.24
D	.004 / 0.10	.006 / 0.15
E	.050 / 1.27	.060 / 1.52
F	.118 / 3.00	.130 / 3.30

**ORDER CODE: ASI10578**

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CBO}$	$I_C = 1.0$ mA	40			V
$BV_{CEO}$	$I_C = 1.0$ mA	28			V
$BV_{EBO}$	$I_E = 1.0$ mA	3.5			V
$I_{CBO}$	$V_{CB} = 24$ V			0.5	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 100$ mA	20		120	---
$C_{OB}$	$V_{CB} = 24$ V $f = 1.0$ MHz			5.0	pF
$P_G$	$V_{CC} = 24$ V $I_{CQ} = 125$ mA $f = 960$ MHz $P_{OUT} = 1.0$ W	10			dB