

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI CBSL1** is Designed for UHF Class A Amplifier Applications in Cellular Base Station Equipment.

FEATURES:

- $P_g = 10$ dB min. @ 960 MHz
- $P_{1dB} = 1.0$ Watts min. at 960 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

| | |
|---------------|---------------------------------|
| I_C | 0.25 A |
| V_{CBO} | 40 V |
| V_{CEO} | 28 V |
| V_{EBO} | 3.5 V |
| P_{DISS} | 7.0 W @ $T_C = 25^\circ C$ |
| T_J | $-65^\circ C$ to $+200^\circ C$ |
| T_{STG} | $-65^\circ C$ to $+150^\circ C$ |
| θ_{JC} | $25^\circ C/W$ |

PACKAGE STYLE .280 4L STUD

| DIM | MINIMUM inches / mm | MAXIMUM inches / mm |
|-----|------------------------|------------------------|
| A | 1.010 / 25.65 | 1.055 / 26.80 |
| B | .220 / 5.59 | .230 / 5.84 |
| C | .270 / 6.86 | .285 / 7.24 |
| D | .003 / 0.08 | .007 / 0.18 |
| E | .117 / 2.97 | .137 / 3.48 |
| F | .572 / 14.53 | |
| G | .130 / 3.30 | |
| H | .245 / 6.22 | .255 / 6.48 |
| I | .640 / 16.26 | |
| J | .175 / 4.45 | .217 / 5.51 |
| K | .275 / 6.99 | .285 / 7.24 |

ORDER CODE: ASI10577

CHARACTERISTICS $T_C = 25^\circ C$

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|--------------------|---|-----------|---------|---------|---------|
| BV_{CBO} | $I_C = 1.0$ mA | 40 | | | V |
| BV_{CEO} | $I_C = 1.0$ mA | 25 | | | V |
| BV_{EBO} | $I_E = 1.0$ mA | 3.5 | | | V |
| I_{CBO} | $V_{CB} = 24$ V | | | 500 | μA |
| h_{FE} | $V_{CE} = 5.0$ V $I_C = 100$ mA | 20 | | 120 | --- |
| C_{OB} | $V_{CB} = 28$ V $f = 1.0$ MHz | | | 5.0 | pF |
| P_G P_{1dB} | $V_{CC} = 24$ V $I_{CQ} = 125$ mA $f = 960$ MHz | 10 1.0 | | | dB W |