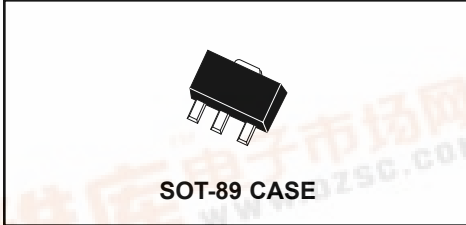


**CBCX68
CBCX69**

**SILICON COMPLEMENTARY
SMALL SIGNAL TRANSISTORS**



Central™ Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CBCX68, CBCX69 types are complementary silicon transistor manufactured by epitaxial planar process, epoxy molded in a surface mount package, designed for applications requiring high current capability.

MAXIMUM RATINGS (T_A=25°C)

| | SYMBOL | | UNITS |
|---------------------------|-----------------------------------|-------------|-------|
| Collector-Emitter Voltage | V _{CES} | 25 | V |
| Collector-Emitter Voltage | V _{CEO} | 20 | V |
| Emitter-Base Voltage | V _{EBO} | 5.0 | V |
| Collector Current | I _C | 1.0 | A |
| Collector Current-Peak | I _{CM} | 2.0 | A |
| Base Current | I _B | 100 | mA |
| Base Current Peak | I _{BM} | 200 | mA |
| Power Dissipation | P _D | 1.2 | W |
| Operating and Storage | | | |
| Junction Temperature | T _J , T _{stg} | -65 to +150 | °C |
| Thermal Temperature | θ _{JA} | 104 | °C/W |

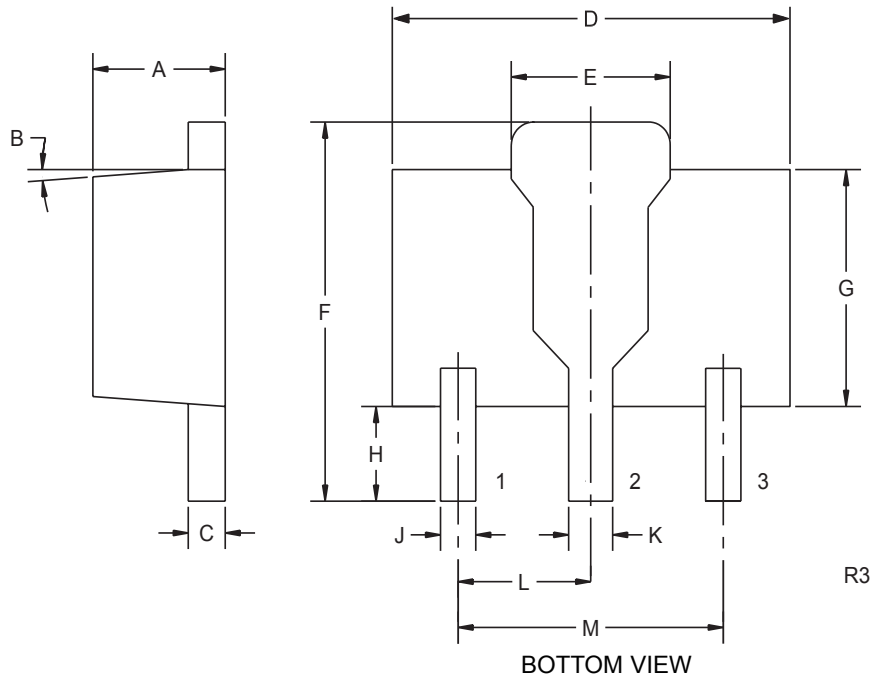
ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|----------------------|--|-----|-----|-----|-------|
| I _{CBO} | V _{CB} =25V | | | 100 | nA |
| I _{CBO} | V _{CB} =25V, T _A =150°C | | | | µA |
| I _{EBO} | V _{EB} =5.0V | | | 10 | µA |
| BV _{CB0} | I _C =10µA | 25 | | | V |
| BV _{CEO} | I _C =10mA | 20 | | | V |
| BV _{EBO} | I _E =1.0µA | 5.0 | | | V |
| V _{CE(SAT)} | I _C =1.0A, I _B =100mA | | | 0.5 | V |
| V _{BE(ON)} | V _{CE} =10V, I _C =5.0mA | | 0.6 | | V |
| V _{BE(ON)} | V _{CE} =1.0V, I _C =1.0A | | | 1.0 | V |
| h _{FE} | V _{CE} =10V, I _C =500mA | 50 | | | |
| h _{FE} | V _{CE} =1.0, I _C =500mA | 85 | | 375 | |
| h _{FE} | V _{CE} =1.0V, I _C =1.0A | 60 | | | |
| f _T | V _{CE} =5.0V, I _C =10mA, f=20MHz | 65 | | | MHz |

R4 (19-December 2001)

**SILICON COMPLEMENTARY
SMALL SIGNAL TRANSISTORS**

MECHANICAL OUTLINE - SOT-89



LEAD CODE:

- 1) EMITTER
- 2) COLLECTOR
- 3) BASE

| SYMBOL | DIMENSIONS | | | |
|--------|------------|-------|-------------|------|
| | INCHES | | MILLIMETERS | |
| | MIN | MAX | MIN | MAX |
| A | 0.055 | 0.067 | 1.40 | 1.70 |
| B | 4° | | 4° | |
| C | 0.016 | 0.018 | 0.40 | 0.46 |
| D | 0.173 | 0.185 | 4.40 | 4.70 |
| E | 0.070 | 0.074 | 1.79 | 1.87 |
| F | 0.146 | 0.177 | 3.70 | 4.50 |
| G | 0.094 | 0.106 | 2.40 | 2.70 |
| H | 0.028 | 0.051 | 0.70 | 1.30 |
| J | 0.015 | 0.019 | 0.38 | 0.48 |
| K | 0.019 | 0.023 | 0.48 | 0.58 |
| L | 0.059 | | 1.50 | |
| M | 0.118 | | 3.00 | |

SOT-89 (REV: R3)