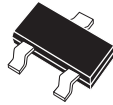


CBAT754  
CBAT754A  
CBAT754C  
CBAT754S

SURFACE MOUNT  
SILICON SCHOTTKY DIODES



SOT-23 CASE

**Central**<sup>TM</sup>  
**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CBAT754 Series types are Silicon Schottky Diodes in an SOT-23 Surface Mount Package.

CBAT754: SINGLE  
CBAT754A: DUAL, COMMON ANODE  
CBAT754C: DUAL, COMMON CATHODE  
CBAT754S: DUAL, IN SERIES

**MARKING CODE: C2K**  
**MARKING CODE: C2LA**  
**MARKING CODE: C2MC**  
**MARKING CODE: C2NS**

**MAXIMUM RATINGS:** ( $T_A=25^{\circ}\text{C}$ )

|                                          | SYMBOL         |             | UNITS                |
|------------------------------------------|----------------|-------------|----------------------|
| Continuous Reverse Voltage               | $V_R$          | 30          | V                    |
| Continuous Forward Current               | $I_F$          | 200         | mA                   |
| Peak Repetitive Forward Current          | $I_{FRM}$      | 300         | mA                   |
| Forward Surge Current, $t_p=10\text{ms}$ | $I_{FSM}$      | 600         | mA                   |
| Power Dissipation                        | $P_D$          | 350         | mW                   |
| Operating and Storage                    |                |             |                      |
| Junction Temperature                     | $T_J, T_{stg}$ | -65 to +150 | $^{\circ}\text{C}$   |
| Thermal Resistance                       | $\theta_{JA}$  | 357         | $^{\circ}\text{C/W}$ |

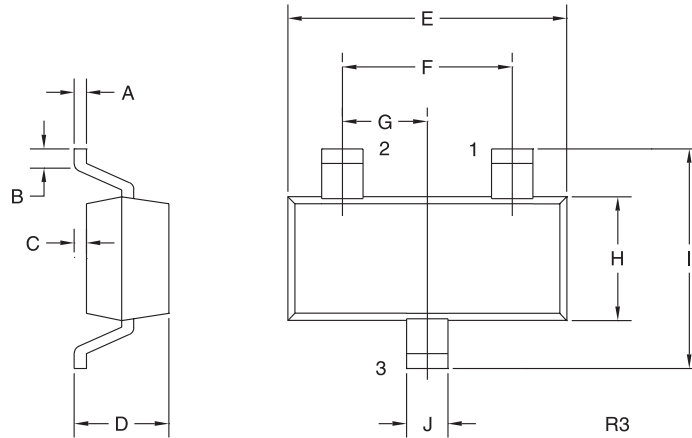
**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

| SYMBOL   | TEST CONDITIONS                                                 | MAX | UNITS         |
|----------|-----------------------------------------------------------------|-----|---------------|
| $I_R$    | $V_R=25\text{V}$                                                | 2.0 | $\mu\text{A}$ |
| $V_F$    | $I_F=0.1\text{mA}$                                              | 200 | mV            |
| $V_F$    | $I_F=1.0\text{mA}$                                              | 260 | mV            |
| $V_F$    | $I_F=10\text{mA}$                                               | 340 | mV            |
| $V_F$    | $I_F=30\text{mA}$                                               | 420 | mV            |
| $V_F$    | $I_F=100\text{mA}$                                              | 500 | mV            |
| $C_d$    | $V_R=1.0\text{V}$ , $f=1.0\text{ MHz}$                          | 10  | pF            |
| $t_{rr}$ | $I_F=I_R=10\text{mA}$ , $I_{rr}=1.0\text{mA}$ , $R_L=100\Omega$ | 5.0 | ns            |

R0 (27-January 2005)

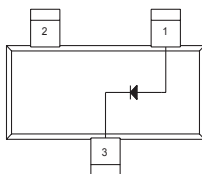
**SURFACE MOUNT  
SILICON SCHOTTKY DIODES**

**SOT-23 CASE - MECHANICAL OUTLINE**



| SYMBOL | DIMENSIONS |       |             |      |
|--------|------------|-------|-------------|------|
|        | INCHES     |       | MILLIMETERS |      |
|        | MIN        | MAX   | MIN         | MAX  |
| A      | 0.003      | 0.007 | 0.08        | 0.18 |
| B      | 0.006      | -     | 0.15        | -    |
| C      | -          | 0.005 | -           | 0.13 |
| D      | 0.035      | 0.043 | 0.89        | 1.09 |
| E      | 0.110      | 0.120 | 2.80        | 3.05 |
| F      | 0.075      |       | 1.90        |      |
| G      | 0.037      |       | 0.95        |      |
| H      | 0.047      | 0.055 | 1.19        | 1.40 |
| I      | 0.083      | 0.098 | 2.10        | 2.49 |
| J      | 0.014      | 0.020 | 0.35        | 0.50 |

SOT-23 (REV: R3)

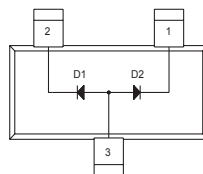


**LEAD CODE:**

**CBAT754**

- 1) Anode
- 2) No Connection
- 3) Cathode

**MARKING  
CODE: C2K**

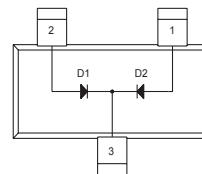


**LEAD CODE:**

**CBAT754A**

- 1) Cathode D2
- 2) Cathode D1
- 3) Anode D1, Anode D2

**MARKING  
CODE: C2LA**

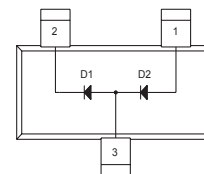


**LEAD CODE:**

**CBAT754C**

- 1) Anode D2
- 2) Anode D1
- 3) Cathode D1, Cathode D2

**MARKING  
CODE: C2MC**



**LEAD CODE:**

**CBAT754S**

- 1) Anode D2
- 2) Cathode D1
- 3) Anode D1, Cathode D2

**MARKING  
CODE: C2NS**

R0 (27-January 2005)