

CBAT54W
 CBAT54AW
 CBAT54CW
 CBAT54SW

**SURFACE MOUNT
 SILICON SCHOTTKY DIODES**

SUPERmini™



SOT-323 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CBAT54W Series types are Silicon Schottky Diodes in an SOT-323 Surface Mount Package.

CBAT54W: SINGLE
 CBAT54AW: DUAL, COMMON ANODE
 CBAT54CW: DUAL, COMMON CATHODE
 CBAT54SW: DUAL, IN SERIES

MARKING CODE: C4L
MARKING CODE: C42
MARKING CODE: C4C
MARKING CODE: C44

MAXIMUM RATINGS: (T_A=25°C)

Continuous Reverse Voltage
 Continuous Forward Current
 Peak Repetitive Forward Current
 Forward Surge Current, tp=10ms
 Power Dissipation
 Operating and Storage Junction Temperature
 Thermal Resistance

SYMBOL

V_R 30
 I_F 200
 I_{FRM} 300
 I_{FSM} 600
 P_D 250
 T_J, T_{stg} -65 to +150
 Θ_{JA} 500

UNITS

V
 mA
 mA
 mA
 mW
 °C
 °C/W

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

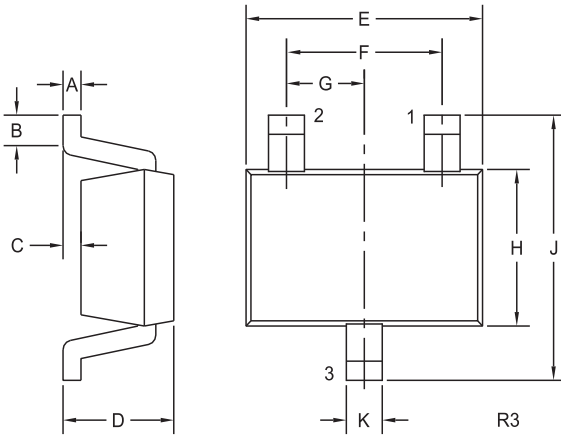
| SYMBOL | TEST CONDITIONS | MAX | UNITS |
|-----------------|--|-----|-------|
| I _R | V _R =25V | 2.0 | μA |
| V _F | I _F =0.1mA | 240 | mV |
| V _F | I _F =1.0mA | 320 | mV |
| V _F | I _F =10mA | 400 | mV |
| V _F | I _F =30mA | 500 | mV |
| V _F | I _F =100mA | 800 | mV |
| C _d | V _R =1.0V, f=1.0MHz | 10 | pF |
| t _{rr} | I _F =I _R =10mA, I _{rr} =1.0mA, R _L =100Ω | 5.0 | ns |

CBAT54W
 CBAT54AW
 CBAT54CW
 CBAT54SW

SURFACE MOUNT
 SILICON SCHOTTKY DIODES

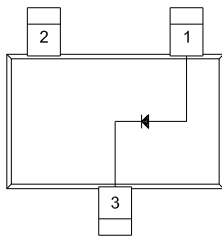


SOT-323 CASE - MECHANICAL OUTLINE



| SYMBOL | INCHES | | MILLIMETERS | |
|--------|--------|-------|-------------|------|
| | MIN | MAX | MIN | MAX |
| A | 0.002 | 0.008 | 0.05 | 0.20 |
| B | 0.004 | - | 0.10 | - |
| C | - | 0.004 | - | 0.10 |
| D | 0.031 | 0.043 | 0.80 | 1.10 |
| E | 0.071 | 0.087 | 1.80 | 2.20 |
| F | 0.051 | | 1.30 | |
| G | 0.026 | | 0.65 | |
| H | 0.045 | 0.053 | 1.15 | 1.35 |
| J | 0.079 | 0.087 | 2.00 | 2.20 |
| K | 0.008 | 0.016 | 0.20 | 0.40 |

SOT-323 (REV: R3)

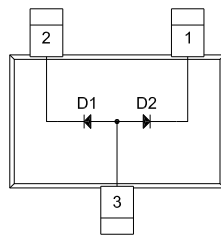


CBAT54W

LEAD CODE:

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

**MARKING
 CODE: C4L**

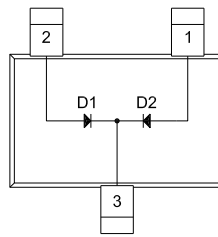


CBAT54AW

LEAD CODE:

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

**MARKING
 CODE: C42**

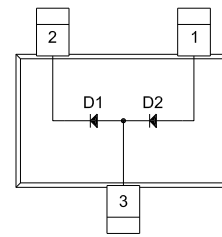


CBAT54CW

LEAD CODE:

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

**MARKING
 CODE: C4C**



CBAT54SW

LEAD CODE:

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

**MARKING
 CODE: C44**

R1 (4-January 2010)