

CBAT54W  
 CBAT54AW  
 CBAT54CW  
 CBAT54SW

**SURFACE MOUNT  
 SILICON SCHOTTKY DIODES**

**SUPERmini™**



**SOT-323 CASE**

# Central™

**Semiconductor Corp.**

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

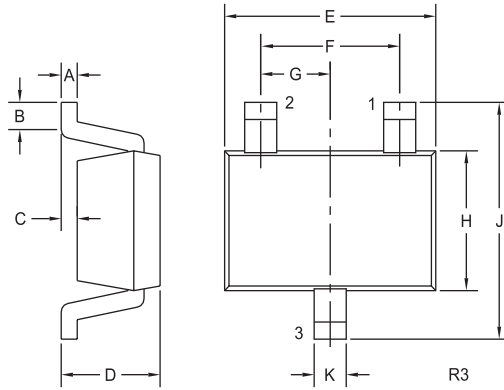
	SYMBOL		UNITS
Continuous Reverse Voltage	$V_R$	30	V
Continuous Forward Current	$I_F$	200	mA
Peak Repetitive Forward Current	$I_{FRM}$	300	mA
Forward Surge Current, $t_p=10\text{ms}$	$I_{FSM}$	600	mA
Power Dissipation	$P_D$	250	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	500	$^\circ\text{C/W}$

**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	$\mu\text{A}$
$V_F$	$I_F=0.1\text{mA}$	240	mV
$V_F$	$I_F=1.0\text{mA}$	320	mV
$V_F$	$I_F=10\text{mA}$	400	mV
$V_F$	$I_F=30\text{mA}$	500	mV
$V_F$	$I_F=100\text{mA}$	800	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

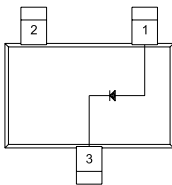
**SURFACE MOUNT  
SILICON SCHOTTKY DIODES**

**SOT-323 CASE - MECHANICAL OUTLINE**



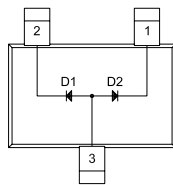
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.002	0.008	0.05	0.20
B	0.004	-	0.10	-
C	-	0.004	-	0.10
D	0.031	0.043	0.80	1.10
E	0.071	0.087	1.80	2.20
F	0.051		1.30	
G	0.026		0.65	
H	0.045	0.053	1.15	1.35
J	0.079	0.087	2.00	2.20
K	0.008	0.016	0.20	0.40

SOT-323 (REV: R3)



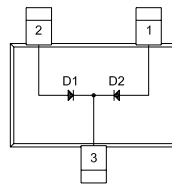
**LEAD CODE:**  
**CBAT54W**  
1) Anode  
2) No Connection  
3) Cathode

**MARKING  
CODE: C4L**



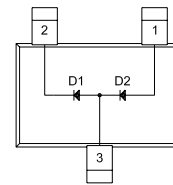
**LEAD CODE:**  
**CBAT54AW**  
1) Cathode D2  
2) Cathode D1  
3) Anode D1, Anode D2

**MARKING  
CODE: C42**



**LEAD CODE:**  
**CBAT54CW**  
1) Anode D2  
2) Anode D1  
3) Cathode D1, Cathode D2

**MARKING  
CODE: C4C**



**LEAD CODE:**  
**CBAT54SW**  
1) Anode D2  
2) Cathode D1  
3) Anode D1, Cathode D2

**MARKING  
CODE: C44**