

CBAT54W
CBAT54AW
CBAT54CW
CBAT54SW

**SURFACE MOUNT
SILICON SCHOTTKY DIODES**

SUPERmini™



SOT-323 CASE



www.centralemi.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: ($T_A=25^{\circ}\text{C}$)

Continuous Reverse Voltage
Continuous Forward Current
Peak Repetitive Forward Current
Forward Surge Current, $t_p=10\text{ms}$
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
 $^{\circ}\text{C}$
 $^{\circ}\text{C/W}$

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

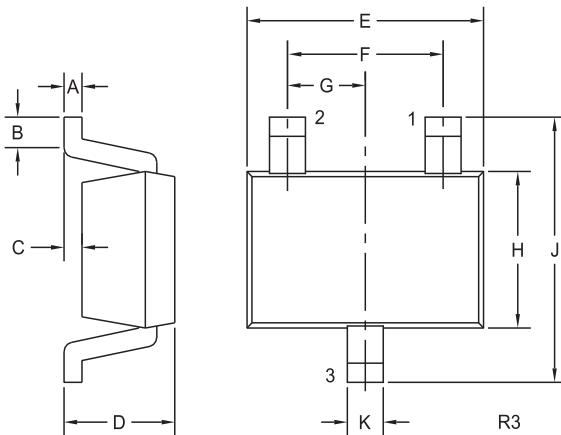
SYMBOL	TEST CONDITIONS	MAX	UNITS
I_R	$V_R=25\text{V}$	2.0	μA
V_F	$I_F=0.1\text{mA}$	240	mV
V_F	$I_F=1.0\text{mA}$	320	mV
V_F	$I_F=10\text{mA}$	400	mV
V_F	$I_F=30\text{mA}$	500	mV
V_F	$I_F=100\text{mA}$	800	mV
C_d	$V_R=1.0\text{V}$, $f=1.0\text{MHz}$	10	pF
t_{rr}	$I_F=I_R=10\text{mA}$, $I_{rr}=1.0\text{mA}$, $R_L=100\Omega$	5.0	ns

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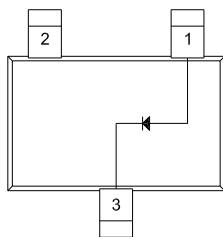


SOT-323 CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	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)



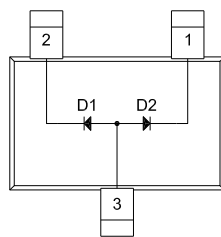
CBAT54W

LEAD CODE:

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

MARKING

CODE: C4L



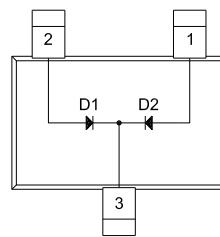
CBAT54AW

LEAD CODE:

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

MARKING

CODE: C42



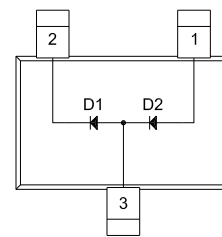
CBAT54CW

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)