

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	θ_{JA}	500	$^\circ\text{C/W}$

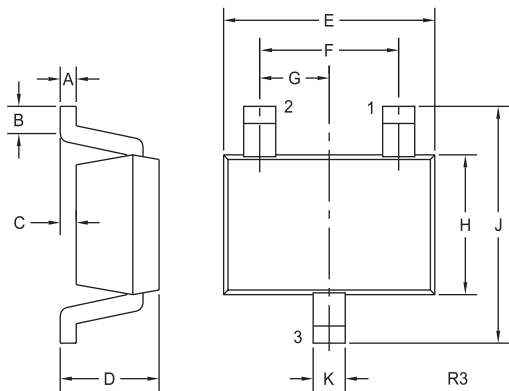
ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MAX	UNITS
I_R	$V_R=25\text{V}$	2.0	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

R0 (24-February 2005)

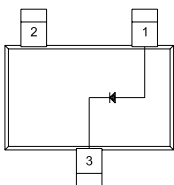
SURFACE MOUNT
SILICON SCHOTTKY DIODES

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)



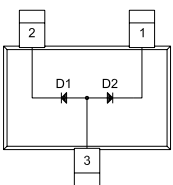
LEAD CODE:

CBAT54W

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

MARKING

CODE: C4L



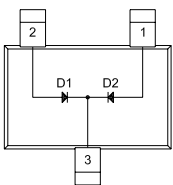
LEAD CODE:

CBAT54AW

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

MARKING

CODE: C42



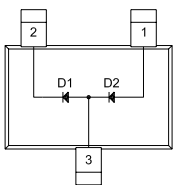
LEAD CODE:

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