

CBAT54
 CBAT54A
 CBAT54C
 CBAT54S

**SURFACE MOUNT
 SILICON SCHOTTKY DIODES**



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CBAT54 Series types are Silicon Schottky Diodes in an SOT-23 Surface Mount Package.



SOT-23 CASE

CBAT54: SINGLE
 CBAT54A: DUAL, COMMON ANODE
 CBAT54C: DUAL, COMMON CATHODE
 CBAT54S: DUAL, IN SERIES

MARKING CODE: CL4
MARKING CODE: CL42
MARKING CODE: CL43
MARKING CODE: CL44

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		UNITS
V_R	30	V
I_F	200	mA
I_{FRM}	300	mA
I_{FSM}	600	mA
P_D	350	mW
T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Θ_{JA}	357	$^\circ\text{C/W}$

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

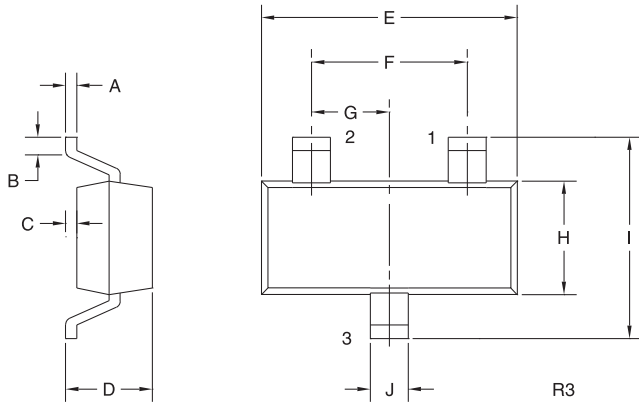
SYMBOL	TEST CONDITIONS	MAX	UNITS
I_R	$V_R=25\text{V}$	2.0	μA
V_F	$I_F=0.1\text{mA}$	240	mV
V_F	$I_F=1.0\text{mA}$	320	mV
V_F	$I_F=10\text{mA}$	400	mV
V_F	$I_F=30\text{mA}$	500	mV
V_F	$I_F=100\text{mA}$	800	mV
C_d	$V_R=1.0\text{V}, f=1.0\text{MHz}$	10	pF
t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA},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

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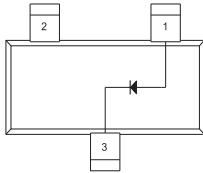


SOT-23 CASE - MECHANICAL OUTLINE



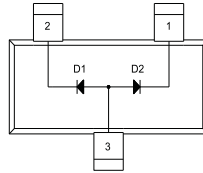
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)



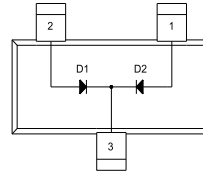
LEAD CODE:
CBAT54
 1) Anode
 2) No Connection
 3) Cathode

MARKING CODE: CL4



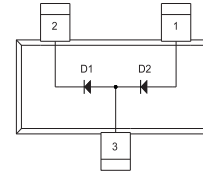
LEAD CODE:
CBAT54A
 1) Cathode D2
 2) Cathode D1
 3) Anode D1, Anode D2

MARKING CODE: CL42



LEAD CODE:
CBAT54C
 1) Anode D2
 2) Anode D1
 3) Cathode D1, Cathode D2

MARKING CODE: CL43



LEAD CODE:
CBAT54S
 1) Anode D2
 2) Cathode D1
 3) Anode D1, Cathode D2

MARKING CODE: CL44

R1 (20-November 2009)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

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- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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