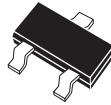


CBAT54  
 CBAT54A  
 CBAT54C  
 CBAT54S

**SURFACE MOUNT  
 SILICON SCHOTTKY DIODES**



**SOT-23 CASE**

# Central<sup>TM</sup> Semiconductor Corp.

**DESCRIPTION:**

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

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

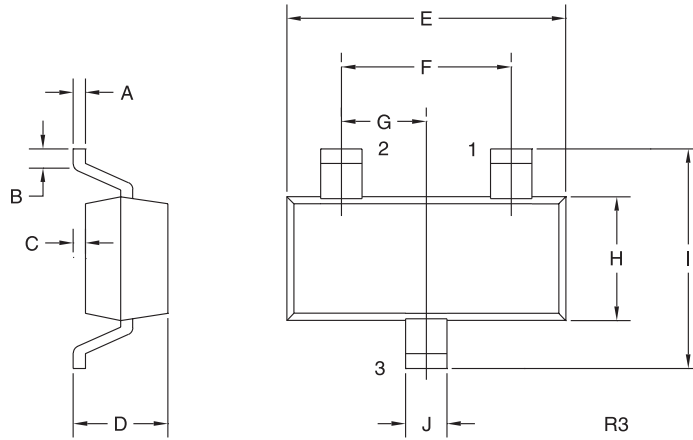
	SYMBOL		UNITS
Continuous Reverse Voltage	$V_R$	30	V
Continuous Forward Current	$I_F$	200	mA
Peak Repetitive Forward Current	$I_{FRM}$	300	mA
Forward Surge Current, $t_p=10\text{ms}$	$I_{FSM}$	600	mA
Power Dissipation	$P_D$	350	mW
Operating and Storage			
Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	$\theta_{JA}$	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	$\mu\text{A}$
$V_F$	$I_F=0.1\text{mA}$	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

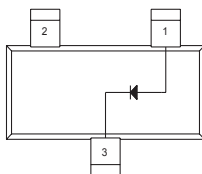
**SURFACE MOUNT  
SILICON SCHOTTKY DIODES**

**SOT-23 CASE - MECHANICAL OUTLINE**



SYMBOL	DIMENSIONS			
	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)

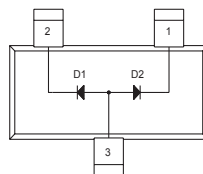


**LEAD CODE:**

**CBAT54**

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

**MARKING  
CODE: CL4**

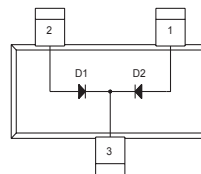


**LEAD CODE:**

**CBAT54A**

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

**MARKING  
CODE: CL42**

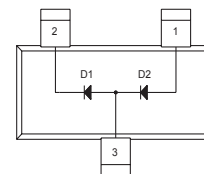


**LEAD CODE:**

**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**

R0 (13-January 2005)