

CBAT54W  
 CBAT54AW  
 CBAT54CW  
 CBAT54SW

**SURFACE MOUNT SILICON  
 SCHOTTKY DIODES**



**SOT-323 CASE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CBAT54W series devices 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		UNITS
$V_R$	30	V
$I_F$	200	mA
$I_{FRM}$	300	mA
$I_{FSM}$	600	mA
$P_D$	250	mW
$T_J, T_{stg}$	-65 to +150	$^{\circ}\text{C}$
$\theta_{JA}$	500	$^{\circ}\text{C/W}$

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

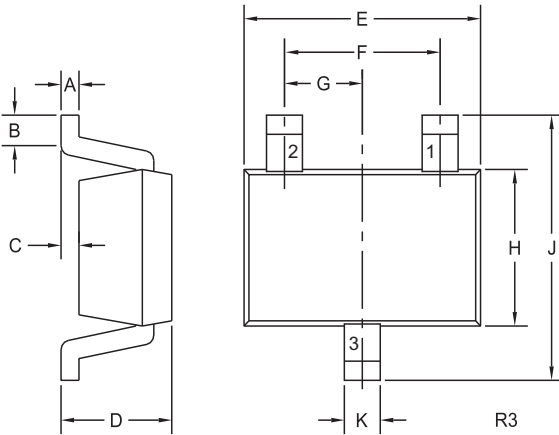
SYMBOL	TEST CONDITIONS	MAX	UNITS
$I_R$	$V_R=25\text{V}$	2.0	$\mu\text{A}$
$V_F$	$I_F=0.1\text{mA}$	240	mV
$V_F$	$I_F=1.0\text{mA}$	320	mV
$V_F$	$I_F=10\text{mA}$	400	mV
$V_F$	$I_F=30\text{mA}$	500	mV
$V_F$	$I_F=100\text{mA}$	800	mV
$C_J$	$V_R=1.0\text{V}, f=1.0\text{MHz}$	10	pF
$t_{rr}$	$I_F=I_R=10\text{mA},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

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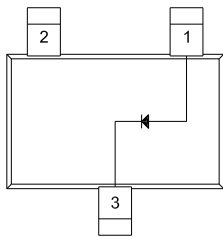


SOT-323 CASE - MECHANICAL OUTLINE



SYMBOL	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)

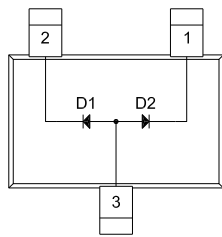


**CBAT54W**

**LEAD CODE:**

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

**MARKING  
 CODE: C4L**

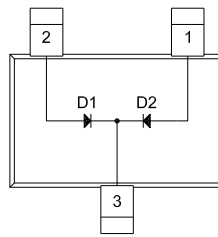


**CBAT54AW**

**LEAD CODE:**

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

**MARKING  
 CODE: C42**

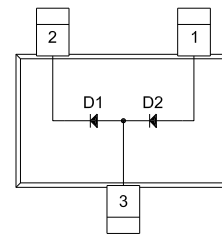


**CBAT54CW**

**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**

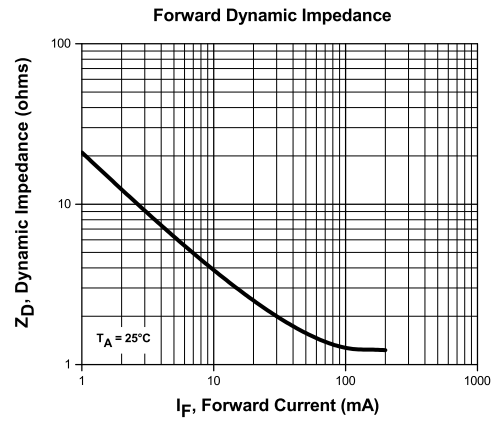
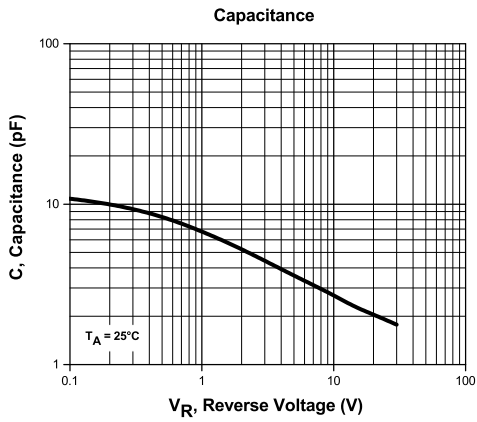
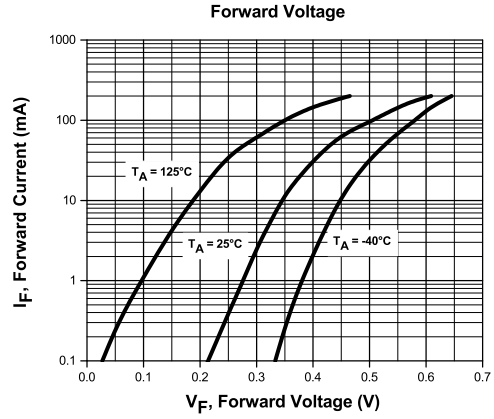
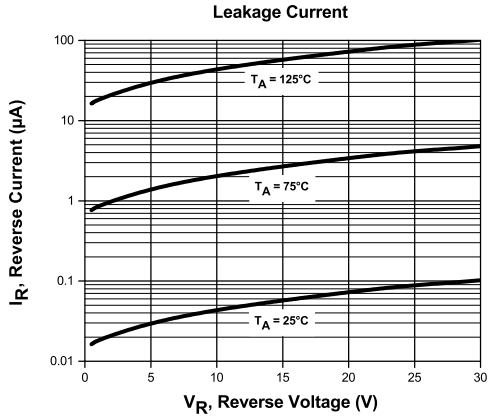
R2 (16-February 2016)

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TYPICAL ELECTRICAL CHARACTERISTICS



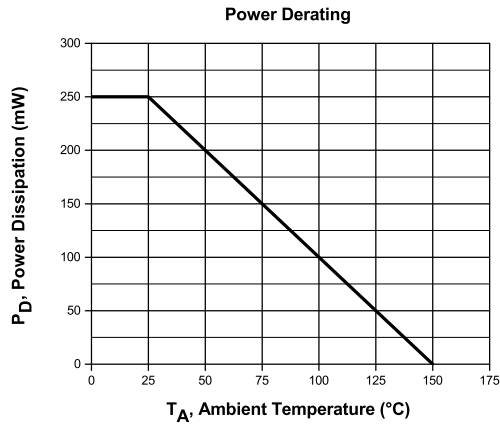
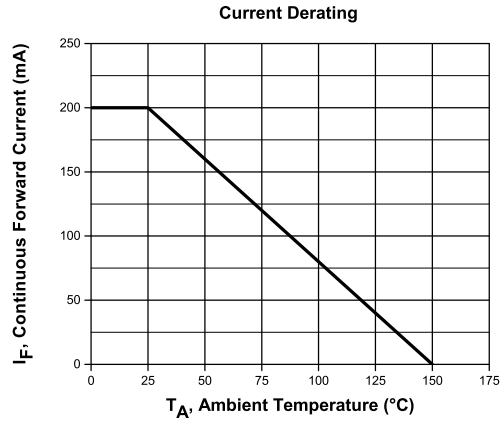
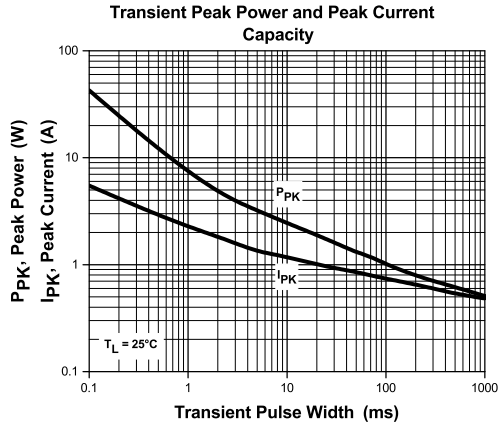
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TYPICAL ELECTRICAL CHARACTERISTICS



R2 (16-February 2016)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2<sup>nd</sup> day air)
- 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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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

#### Corporate Headquarters & Customer Support Team

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