

CBAT54W
 CBAT54AW
 CBAT54CW
 CBAT54SW

**SURFACE MOUNT SILICON
 SCHOTTKY DIODES**



SOT-323 CASE



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	$^\circ\text{C}$
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_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

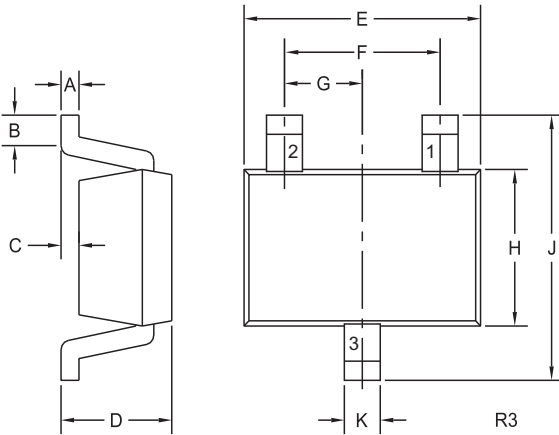
R2 (16-February 2016)

CBAT54W
 CBAT54AW
 CBAT54CW
 CBAT54SW

SURFACE MOUNT SILICON
 SCHOTTKY DIODES

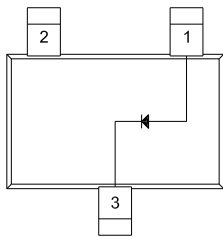


SOT-323 CASE - MECHANICAL OUTLINE



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)

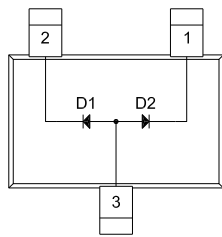


CBAT54W

LEAD CODE:

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

**MARKING
 CODE: C4L**

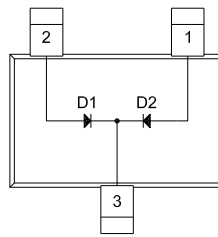


CBAT54AW

LEAD CODE:

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

**MARKING
 CODE: C42**

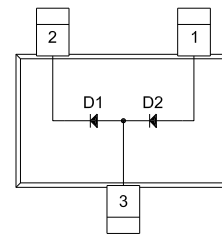


CBAT54CW

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**

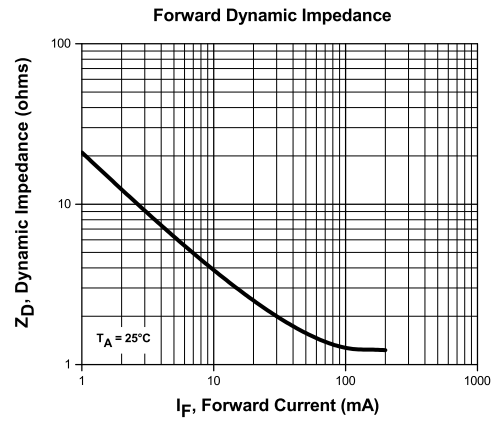
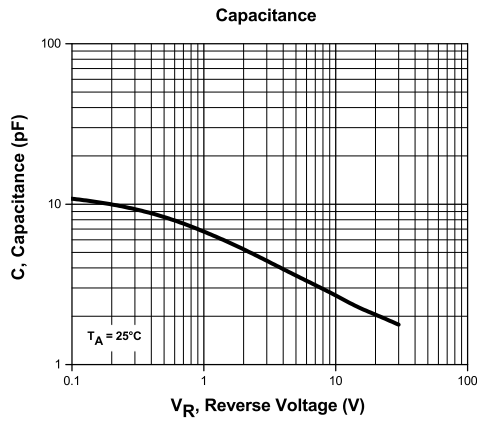
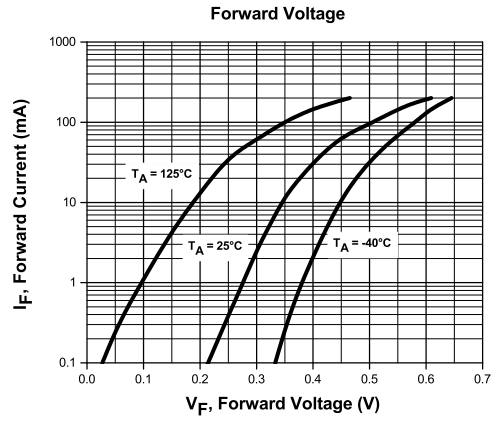
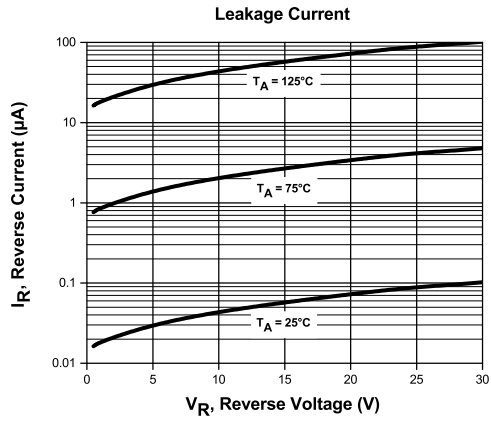
R2 (16-February 2016)

CBAT54W
 CBAT54AW
 CBAT54CW
 CBAT54SW

SURFACE MOUNT SILICON
 SCHOTTKY DIODES



TYPICAL ELECTRICAL CHARACTERISTICS



R2 (16-February 2016)

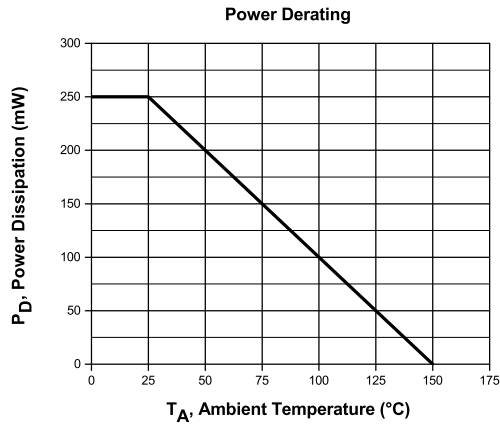
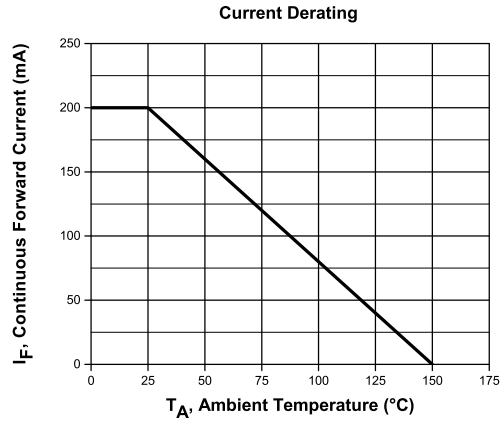
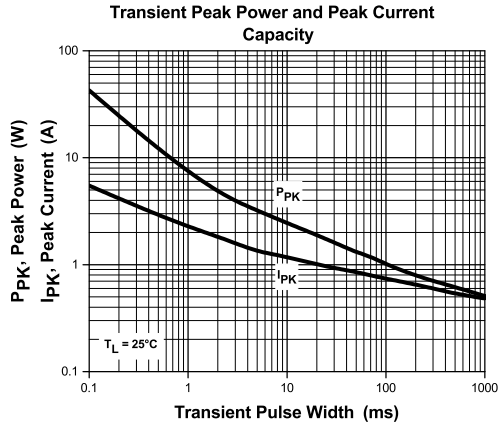
www.centrasemi.com

CBAT54W
 CBAT54AW
 CBAT54CW
 CBAT54SW

SURFACE MOUNT SILICON
 SCHOTTKY DIODES



TYPICAL ELECTRICAL CHARACTERISTICS



R2 (16-February 2016)

www.centrasemi.com



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.

- Free quick ship samples (2nd 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

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).

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms