

SURFACE MOUNT SILICON SCHOTTKY DIODES



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DESCRIPTION:

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



CBAT54:	SINGLE	MARKING CODE: CL4
CBAT54A:	DUAL, COMMON ANODE	MARKING CODE: CL42
CBAT54C:	DUAL, COMMON CATHODE	MARKING CODE: CL43
CBAT54S:	DUAL, IN SERIES	MARKING CODE: CL44

MAXIMUM RATINGS: (T _A =25°C)	SYMBOL		UNITS
Continuous Reverse Voltage	VR	30	V
Continuous Forward Current	١ _F	200	mA
Peak Repetitive Forward Current	IFRM	300	mA
Forward Surge Current, tp=10ms	IFSM	600	mA
Power Dissipation	PD	350	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	ΘJA	357	°C/W

ELECTRICAL CHARACTERISTICS PER DIODE: (T_A=25°C unless otherwise noted)

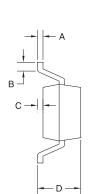
SYMBOL	TEST CONDITIONS	MAX	UNITS
IR	V _R =25V	2.0	μA
V _F	I _F =0.1mA	240	mV
VF	I _F =1.0mA	320	mV
VF	I _F =10mA	400	mV
V _F	I _F =30mA	500	mV
VF	I _F =100mA	800	mV
Cd	V _R =1.0V, f=1.0MHz	10	pF
t _{rr}	I _F =I _R =10mA, I _{rr} =1.0mA, R _L =100Ω	5.0	ns

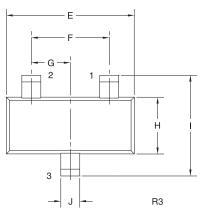
R1 (20-November 2009)



CBAT54 CBAT54A CBAT54C CBAT54S

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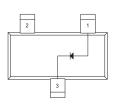




SOT-23 CASE - MECHANICAL OUTLINE

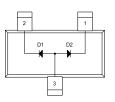
DIMENSIONS MILLIMETERS INCHES SYMBOI MIN MAX MIN MAX 0.003 0.007 0.08 0.18 A В 0.006 0.15 0.005 0.13 С --D 0.035 0.043 0.89 1.09 0.110 0.120 3.05 Е 2.80 F 0.075 1.90 G 0.037 0.95 Н 0.047 0.055 1.19 1.40 T 0.083 0.098 2.10 2.49 0.014 0.020 0.35 0.50 J

SOT-23 (REV: R3)



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

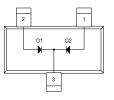
MARKING CODE: CL4



LEAD CODE: CBAT54A

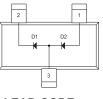
1) Cathode D2 2) Cathode D1 3) Anode D1, Anode D2 MARKING

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

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- SPICE models
- Custom electrical curves
- · Environmental regulation compliance
- Customer specific screening
- · Up-screening capabilities

- · Custom product packing
- - · Special wafer diffusions
 - PbSn plating options
 - · Package details
 - · Application notes
 - · Application and design sample kits
 - · Custom product and package development

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