

CMSD4448
SURFACE MOUNT
HIGH SPEED
SILICON SWITCHING DIODE

SUPERmini™



SOT-323 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMSD4448 type is a ultra-high speed silicon switching diode manufactured by the epitaxial planar process, in an epoxy molded SUPERmini™ surface mount package, designed for high switching applications.

MARKING CODE: ADA

MAXIMUM RATINGS: (T_A=25°C)

Continuous Reverse Voltage
 Peak Repetitive Reverse Voltage
 Continuous Forward Current
 Peak Repetitive Forward Current
 Peak Forward Surge Current, t_p=1.0μs
 Peak Forward Surge Current, t_p=1.0s
 Power Dissipation
 Operating and Storage Junction Temperature
 Thermal Resistance

SYMBOL

V_R 75
 V_{RRM} 100
 I_F 250
 I_{FRM} 500
 I_{FSM} 4.0
 I_{FSM} 1.0
 P_D 275
 T_J, T_{stg} -65 to +150
 Θ_{JA} 455

UNITS

V
 V
 mA
 mA
 A
 A
 mW
 °C
 °C/W

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

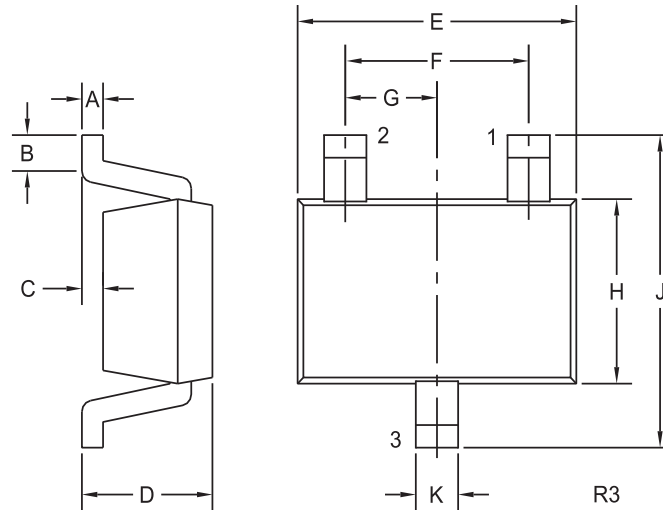
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _R	V _R =20V		25	nA
BV _R	I _R =5.0μA	75		V
BV _R	I _R =100μA	100		V
V _F	I _F =5.0mA	0.62	0.72	V
V _F	I _F =100mA		1.0	V
C _T	V _R =0, f=1.0MHz		4.0	pF
t _{rr}	I _F =I _R =10mA, I _{rr} =1.0mA, R _L =100Ω		4.0	ns

R5 (8-February 2010)

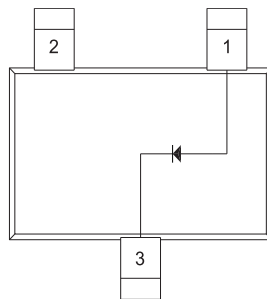
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SOT-323 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



LEAD CODE:

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

MARKING CODE: ADA

DIMENSIONS

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)

R5 (8-February 2010)

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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

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