CMSD4448

SURFACE MOUNT
HIGH SPEED
SILICON SWITCHING DIODE

SUPERmini™

SOT-323 CASE

Central Semiconductor Corp.

www.centralsemi.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)	**SYMBOL**		**UNITS**
Continuous Reverse Voltage	V_R	75	V
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	250	mA
Peak Repetitive Forward Current	I_{FRM}	500	mA
Peak Forward Surge Current, tp=1.0μs	I_{FSM}	4.0	A
Peak Forward Surge Current, tp=1.0s	I_{FSM}	1.0	A
Power Dissipation	P_D	275	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	455	°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)

CMSD4448

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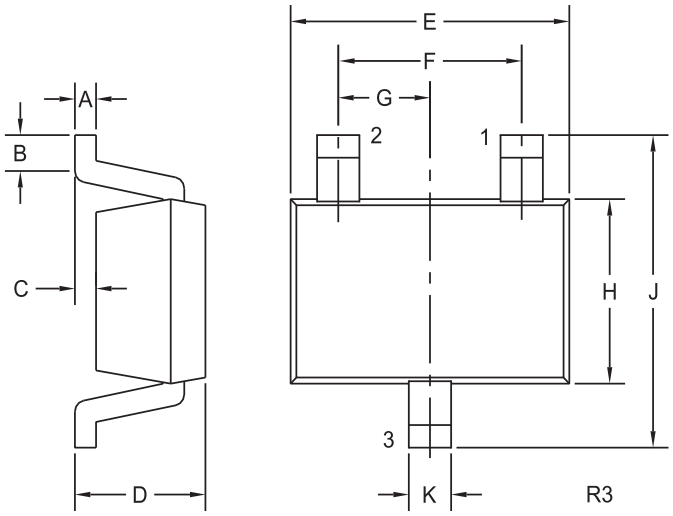
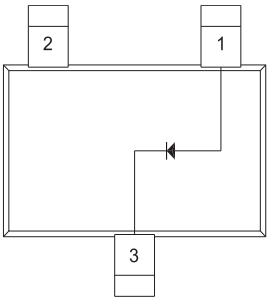
SOT-323 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



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

MARKING CODE: ADA

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)

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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