CMSD4448

SURFACE MOUNT HIGH SPEED SILICON SWITCHING DIODE





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	ΙF	250	mA
Peak Repetitive Forward Current	I _{FRM}	500	mA
Peak Forward Surge Current, tp=1.0µs	I _{FSM}	4.0	Α
Peak Forward Surge Current, tp=1.0s	I _{FSM}	1.0	Α
Power Dissipation	P_{D}	275	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	$\Theta_{\sf JA}$	455	°C/W

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

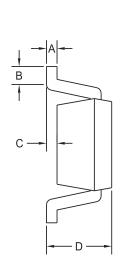
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{R}	V _R =20V		25	nA
BV_R	I _R =5.0μA	75		V
BV_R	I _R =100μA	100		V
V_{F}	I _F =5.0mA	0.62	0.72	V
V_{F}	I _F =100mA		1.0	V
C_T	$V_R=0$, f=1.0MHz		4.0	pF
t _{rr}	$I_F = I_R = 10$ mA, $I_{rr} = 1.0$ mA, $R_L = 100$ Ω		4.0	ns

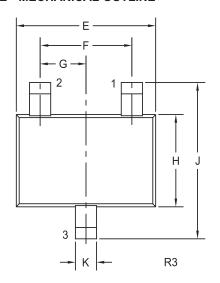
CMSD4448

SURFACE MOUNT HIGH SPEED **SILICON SWITCHING DIODE**

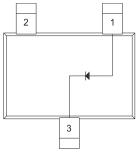


SOT-323 CASE - MECHANICAL OUTLINE





PIN CONFIGURATION



LEAD	CODE:

- 1) Anode
- 2) No Connection3) Cathode

MARKING CODE: ADA

DIMENSIONS						
	INCHES		MILLIMETERS			
SYMBOL	MIN	MAX	MIN	MAX		
Α	0.002	0.008	0.05	0.20		
В	0.004	-	0.10	-		
С	-	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			
Н	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

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.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

Worldwide Distributors:

www.centralsemi.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.centralsemi.com/terms

www.centralsemi.com (000)