

CMDD4448

**SUPERmini™  
HIGH SPEED  
SWITCHING DIODE**

**SUPERmini™**



**SOD-323 CASE**

**Central™**  
**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMDD4448 type is a ultra-high speed silicon switching diode manufactured by the epitaxial planar process, epoxy molded in a SUPERmini™ surface mount package, designed for high speed switching applications. Marking code is **44**.

**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

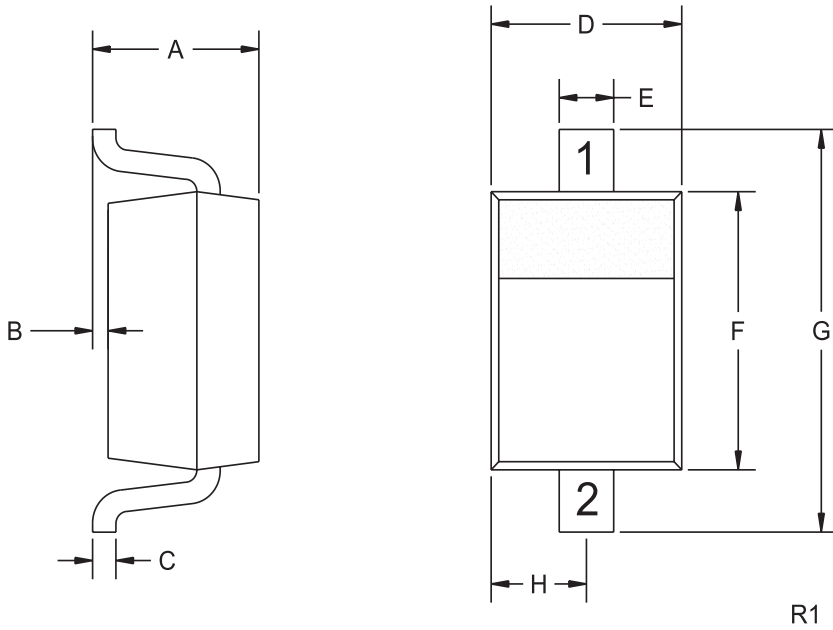
	<b>SYMBOL</b>		<b>UNITS</b>
Continuous Reverse Voltage	$V_R$	75	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V
Continuous Forward Current	$I_F$	250	mA
Peak Repetitive Forward Current	$I_{FRM}$	250	mA
Forward Surge Current, $t_p=1 \mu\text{sec}$ .	$I_{FSM}$	4000	mA
Forward Surge Current, $t_p=1 \text{ sec}$ .	$I_{FSM}$	1000	mA
Power Dissipation	$P_D$	250	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\Theta_{JA}$	500	$^\circ\text{C/W}$

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>MAX</b>	<b>UNITS</b>
$V_{BR}$	$I_R=5.0\mu\text{A}$	75		V
$V_{BR}$	$I_R=100\mu\text{A}$	100		V
$I_R$	$V_R=20\text{V}$		25	nA
$V_F$	$I_F=5.0\text{mA}$	0.62	0.72	V
$V_F$	$I_F=100\text{mA}$		1.0	V
$C_T$	$V_R=0, f=1 \text{ MHz}$		4.0	pF
$t_{rr}$	$I_R=I_F=10\text{mA}, R_L=100\Omega, \text{Rec. to } 1.0\text{mA}$		4.0	ns

R1 ( 20-July 2001)

**SOD-323 - MECHANICAL OUTLINE**



LEAD CODE:

- 1) Cathode
- 2) Anode

**MARKING CODE: 44**

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.039	0.043	1.00	1.10
B	0.000	0.004	0.00	0.10
C	0.005	0.008	0.14	0.22
D	0.045	0.053	1.15	1.35
E	0.011	0.015	0.28	0.38
F	0.063	0.071	1.60	1.80
G	0.094	0.102	2.40	2.60
H	0.023	0.027	0.58	0.68

SOD-323 (REV: R1)

R1 ( 20-July 2001)