

**CMOD4448**  
**SURFACE MOUNT**  
**ULTRAmi™**  
**HIGH SPEED**  
**SILICON SWITCHING DIODE**

**ULTRAmi™**



**SOD-523 CASE**

# Central™

**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMOD4448 type is a ultra-high speed silicon switching diode manufactured by the epitaxial planar process, epoxy molded in an ULTRAmi™ surface mount package, designed for high speed switching applications.

**MARKING CODE: 48**

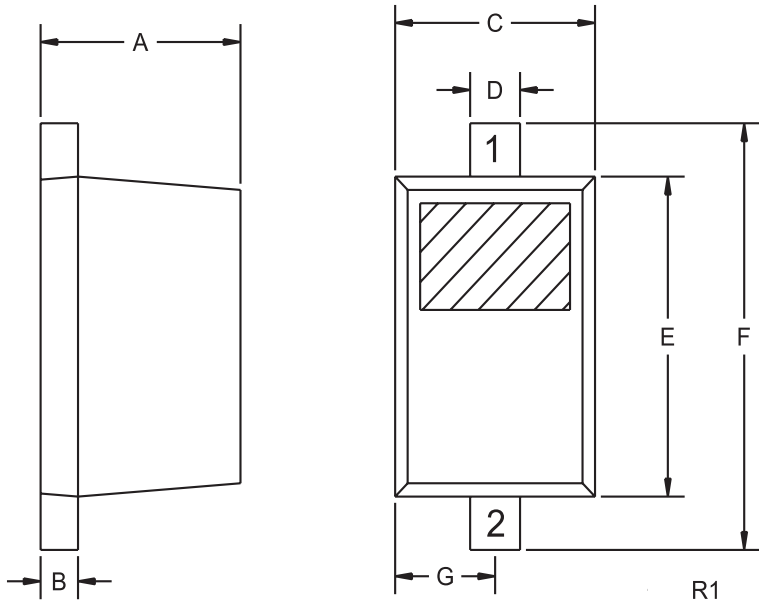
**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

	<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	$I_{FRM}$	500	mA
Forward Surge Current, $t_p=1\text{ms}$	$I_{FSM}$	4.0	A
Forward Surge Current, $t_p=1\text{s}$	$I_{FSM}$	1.0	A
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

SOD-523 CASE - MECHANICAL OUTLINE



**LEAD CODE:**

- 1) CATHODE
- 2) ANODE

**MARKING CODE: 48**

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.020	0.031	0.50	0.80
B	0.004	0.008	0.10	0.20
C	0.028	0.035	0.70	0.90
D	0.008	0.011	0.20	0.28
E	0.039	0.055	1.00	1.40
F	0.055	0.071	1.40	1.80
G	0.016		0.40	

SOD-523 (REV: R1)