

CMOD4448

ULTRAmiTM
HIGH SPEED
SWITCHING DIODE

ULTRAmiTM



SOD-523 CASE

CentralTM
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 ULTRAmiTM surface mount package, designed for high speed switching applications. Marking code is **48**.

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

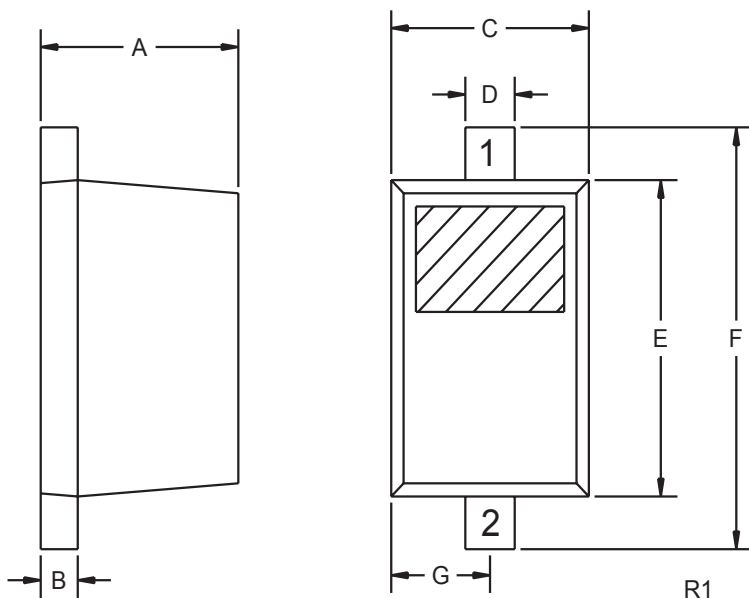
	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	75	V
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	250	mA
Peak Repetitive Forward Current	I_{FRM}	250	mA
Forward Surge Current, $t_p=1 \mu\text{sec}$.	I_{FSM}	4000	mA
Forward Surge Current, $t_p=1 \text{sec}$.	I_{FSM}	1000	mA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

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
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-523 - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: 48

SYMBOL	DIMENSIONS			
	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)

R1 (20-July 2001)