

CLL4448

**SURFACE MOUNT
HIGH SPEED SILICON
SWITCHING DIODE**



SOD-80 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CLL4448 type is a ultra-high speed silicon switching diode manufactured by the epitaxial planar process, in a hermetically sealed glass surface mount package, designed for high speed switching applications.

MARKING: CATHODE BAND

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

Continuous Reverse Voltage
Peak Repetitive Reverse Voltage
Continuous Forward Current
Peak Repetitive Forward Current
Peak Forward Surge Current, $t_p=1.0\mu\text{s}$
Peak Forward Surge Current, $t_p=1.0\text{s}$
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

SYMBOL		UNITS
V_R	75	V
V_{RRM}	100	V
I_F	250	mA
I_{FRM}	500	mA
I_{FSM}	4.0	A
I_{FSM}	1.0	A
P_D	500	mW
T_J, T_{stg}	-65 to +200	$^\circ\text{C}$
Θ_{JA}	350	$^\circ\text{C/W}$

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

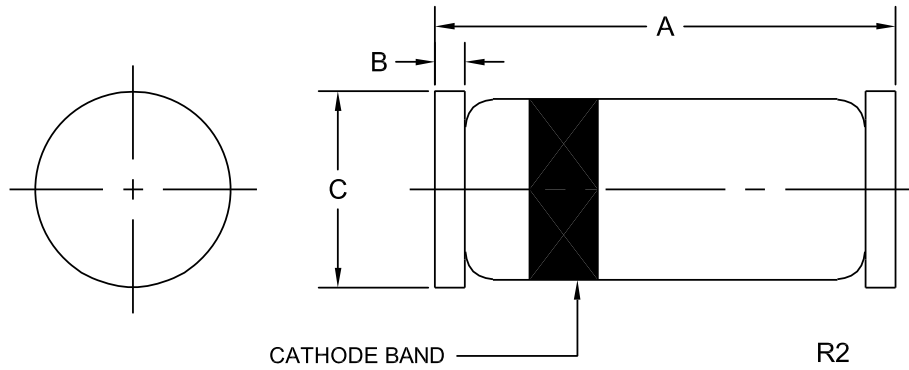
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=20\text{V}$		25	nA
BV_R	$I_R=5.0\mu\text{A}$	75		V
BV_R	$I_R=100\mu\text{A}$	100		V
V_F	$I_F=5.0\text{mA}$	0.62	0.72	V
V_F	$I_F=100\text{mA}$		1.0	V
C_T	$V_R=0, f=1.0\text{ MHz}$		4.0	pF
t_{rr}	$I_R=I_F=10\text{mA}, R_L=100\Omega, \text{Rec. to } 1.0\text{mA}$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

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SOD-80 CASE - MECHANICAL OUTLINE



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SYMBOL	DIMENSIONS	
	INCHES	MILLIMETERS
A	0.130	0.146
B	0.014	0.35
C (DIA)	0.049	0.067

SOD-80 (REV:R2)

R4 (8-January 2010)