

CLL4448

SURFACE MOUNT  
HIGH SPEED SILICON  
SWITCHING DIODE



[www.centralesemi.com](http://www.centralesemi.com)



SOD-80 CASE

**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<sub>A</sub>=25°C)**

Continuous Reverse Voltage	V <sub>R</sub>	75	V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	V
Continuous Forward Current	I <sub>F</sub>	250	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	500	mA
Peak Forward Surge Current, t <sub>p</sub> =1.0μs	I <sub>FSM</sub>	4.0	A
Peak Forward Surge Current, t <sub>p</sub> =1.0s	I <sub>FSM</sub>	1.0	A
Power Dissipation	P <sub>D</sub>	500	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +200	°C
Thermal Resistance	Θ <sub>JA</sub>	350	°C/W

**ELECTRICAL CHARACTERISTICS: (T<sub>A</sub>=25°C unless otherwise noted)**

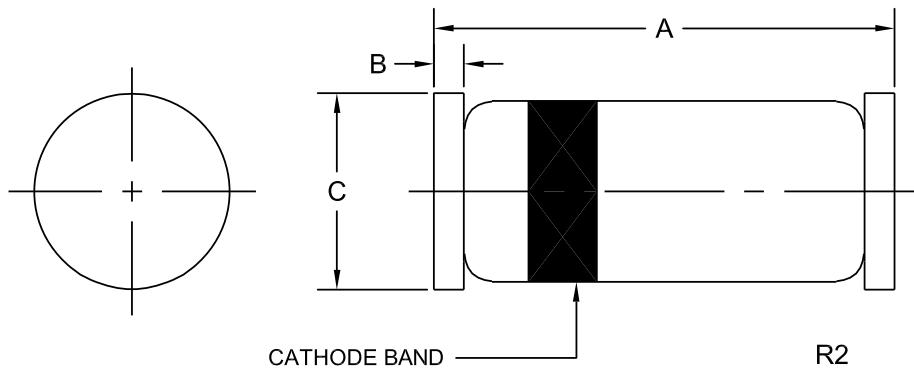
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =20V		25	nA
BV <sub>R</sub>	I <sub>R</sub> =5.0μA	75		V
BV <sub>R</sub>	I <sub>R</sub> =100μA	100		V
V <sub>F</sub>	I <sub>F</sub> =5.0mA	0.62	0.72	V
V <sub>F</sub>	I <sub>F</sub> =100mA		1.0	V
C <sub>T</sub>	V <sub>R</sub> =0, f=1.0 MHz		4.0	pF
t <sub>rr</sub>	I <sub>R</sub> =I <sub>F</sub> =10mA, R <sub>L</sub> =100Ω, Rec. to 1.0mA		4.0	ns

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SOD-80 CASE - MECHANICAL OUTLINE



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SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.130	0.146	3.30	3.71
B		0.014		0.35
C (DIA)	0.049	0.067	1.25	1.70

SOD-80 (REV:R2)

R4 (8-January 2010)

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## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> 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

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

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