

CLL4448

**HIGH SPEED
SWITCHING DIODE**



SOD-80 CASE

CentralTM
Semiconductor Corp.

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 Code: Cathode Band.

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

Continuous Reverse Voltage
Peak Repetitive Reverse Voltage
Continuous Forward Current
Peak Repetitive Forward Current
Forward Surge Current, $t_p=1\ \mu\text{sec}$.
Forward Surge Current, $t_p=1\ \text{sec}$.
Power Dissipation
Operating and Storage
Junction Temperature
Thermal Resistance

SYMBOL

V_R 75
 V_{RRM} 100
 I_F 250
 I_{FRM} 250
 I_{FSM} 4000
 I_{FSM} 1000
 P_D 500

UNITS

V
V
mA
mA
mA
mA
mW
 T_J, T_{stg} -65 to +200
 Θ_{JA} 350
 $^{\circ}\text{C}$
 $^{\circ}\text{C/W}$

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

All dimensions in inches (mm).

