

**CLL4150**  
**HIGH SPEED**  
**SWITCHING DIODE**



**SOD-80 CASE**

**Central**<sup>™</sup>  
**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CLL4150 type is an 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** ( $T_A=25^\circ\text{C}$ )

	<b>SYMBOL</b>		<b>UNITS</b>
Continuous Reverse Voltage	$V_R$	50	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	V
Continuous Forward Current	$I_F$	300	mA
Peak Repetitive Forward Current	$I_{FRM}$	600	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	$P_D$	500	mW
Operating and Storage			
Junction Temperature	$T_J, T_{stg}$	-65 to +200	$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	350	$^\circ\text{C/W}$

**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>
$BV_R$	$I_R=5.0\mu\text{A}$	75		V
$I_R$	$V_R=50\text{V}$		100	nA
$V_F$	$I_F=1.0\text{mA}$	0.54	0.62	V
$V_F$	$I_F=10\text{mA}$	0.66	0.74	V
$V_F$	$I_F=50\text{mA}$	0.76	0.86	V
$V_F$	$I_F=100\text{mA}$	0.82	0.92	V
$V_F$	$I_F=200\text{mA}$	0.87	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).

