

CLL4150
HIGH SPEED
SWITCHING DIODE



SOD-80 CASE

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

	SYMBOL		UNITS
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	θ_{JA}	350	$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
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).

