

CLL914

HIGH SPEED  
SWITCHING DIODE



SOD-80 CASE

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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CLL914 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	$V_R$	75	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V
Continuous Forward Current	$I_F$	250	mA
Peak Repetitive Forward Current	$I_{FRM}$	250	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)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$V_{BR}$	$I_R=100\ \mu\text{A}$	100		V
$I_R$	$V_R=20\text{V}$		25	nA
$I_R$	$V_R=75\text{V}$		5.0	$\mu\text{A}$
$V_F$	$I_F=10\text{mA}$		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).

