

CentralTM Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824

Manufacturers of World Class Discrete Semiconductors

1N914A
1N914B

SILICON SWITCHING DIODE

JEDEC DO-35 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 1N914A,B types are very high speed Silicon Switching Diodes designed for computer and general purpose applications.

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

	SYMBOL		UNIT
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Peak Working Reverse Voltage	V_{RWM}	75	V
Average Forward Current	I_O	150	mA
Forward Steady-State Current	I_F	200	mA
Peak Forward Surge Current (1.0 μ s pulse)	I_{FSM}	2000	mA
Power Dissipation	P_D	500	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 TO +200	$^\circ\text{C}$

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

SYMBOL	TEST CONDITIONS	1N914A		1N914B		UNIT
		MIN	MAX	MIN	MAX	
BV_R	$I_R=5.0\mu\text{A}$	75		75		V
BV_R	$I_R=100\mu\text{A}$	100		100		V
I_R	$V_R=20\text{V}$		25		25	nA
I_R	$V_R=20\text{V}, T_A=100^\circ\text{C}$		-		3.0	μA
I_R	$V_R=20\text{V}, T_A=150^\circ\text{C}$		50		50	μA
V_F	$I_F=5.0\text{mA}$	-	-	0.62	0.72	V
V_F	$I_F=20\text{mA}$		1.0		-	V
V_F	$I_F=100\text{mA}$		-		1.0	V
C_T	$V_R=0, f=1.0\text{ MHz}$		4.0		4.0	pF
t_{rr}	$V_R=6.0\text{V}, I_F=10\text{mA}$					
	$I_{rr}=1.0\text{mA}, R_L=100\Omega$		4.0		4.0	nS
$V_{FM(REC)}$	$I_F=50\text{mA}, R_1=50\Omega$		-		2.5	V