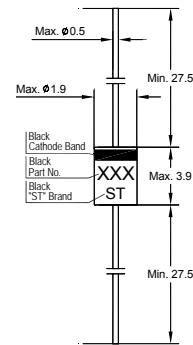


# 1N914, 1N914A, 1N914B

## FAST SWITCHING DIODES

### Features

- Fast Switching Speed
- High Reliability



Glass Case DO-35  
Dimensions in mm

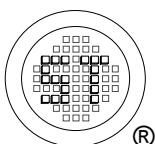
### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Average Rectified Output Current <sup>1)</sup>	$I_O$	75 200	mA
Forward Continuous Current <sup>1)</sup>	$I_{FM}$	150 300	mA
Non-Repetitive Peak Forward Surge Current at $t = 1\text{ s}$ 1N914 at $t = 1\text{ }\mu\text{s}$ 1N914A / B at $t = 1\text{ }\mu\text{s}$	$I_{FSM}$	1 1 4	A
Power Dissipation <sup>1)</sup>	$P_{tot}$	500	mW
Thermal Resistance, Junction to Ambient Air <sup>1)</sup>	$R_{\theta JA}$	300	K/W
Operating and Storage Temperature Range	$T_j, T_s$	- 65 to + 175	$^\circ\text{C}$

### Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 5\text{ mA}$ at $I_F = 100\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 20\text{ mA}$	$V_F$	0.62 - - -	0.72 1 1 1	V
Reverse Current at $V_R = 20\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 20\text{ V}, T_j = 150^\circ\text{C}$	$I_R$	- - -	25 5 50	nA $\mu\text{A}$ $\mu\text{A}$
Diode Capacitance at $V_R = 0, f = 1\text{ MHz}$	$C_j$	-	4	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$ to $I_R = 1\text{ mA}, V_R = 6\text{ V}, R_L = 100\text{ }\Omega$	$t_{rr}$	-	4	ns

<sup>1)</sup> Valid provided that lead are kept at ambient temperature at a distance of 8 mm.



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Sino-Tech International Holdings Limited, a company  
listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949:2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 7116



ISO 9001:2000  
Certificate No. 0506098

Dated : 13/06/2007