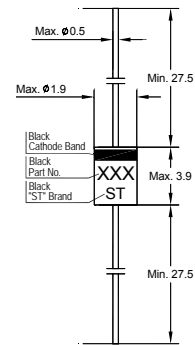


1N914, 1N914A, 1N914B

FAST SWITCHING DIODES

Features

- Fast Switching Speed
- High Reliability



Glass Case DO-35
Dimensions in mm

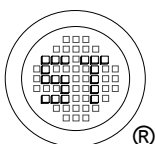
Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

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 ¹⁾	I_O	1N914: 75 1N914A / B: 200	mA
Forward Continuous Current ¹⁾	I_{FM}	1N914: 150 1N914A / B: 300	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	at $t = 1\text{ s}$: 1 1N914 at $t = 1\text{ }\mu\text{s}$: 1 1N914A / B at $t = 1\text{ }\mu\text{s}$: 4	A
Power Dissipation ¹⁾	P_{tot}	500	mW
Thermal Resistance, Junction to Ambient Air ¹⁾	$R_{\theta JA}$	300	K/W
Operating and Storage Temperature Range	T_j, T_s	- 65 to + 175	$^\circ\text{C}$

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

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

¹⁾ 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