

1N914, 1N914A, 1N914B

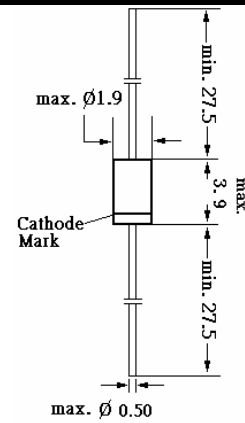
FAST SWITCHING DIODES

Features

- Fast Switching Speed
- High Reliability
- High Conductance
- For General Purpose Switching Applications

Mechanical Data

- **Terminals:** Solderable per MIL-STD-202, Method 208
- **Marking:** Type Number



Glass case JEDEC DO-35

Dimensions in mm

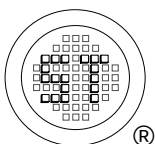
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	150	mA
(Note 1)		300	
Average Rectified Output Current	I_O	75	mA
(Note 1)		200	
Non-Repetitive Peak Forward Surge Current	I_{FSM}	1	A
@ $t = 1\text{s}$		1	
@ $t = 1\mu\text{s}$		4	
Power Dissipation (Note 1)	P_d	500	mW
Derate Above 25°C		1.68	mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	300	K/W
Operating and Storage Temperature Range	T_j, T_s	-65 to +175	$^\circ\text{C}$

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

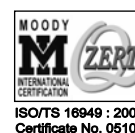
Characteristic	Symbol	Min.	Max.	Unit
Forward Voltage	V_F	-	-	V
at $I_F = 5\text{mA}$				
at $I_F = 100\text{mA}$				
at $I_F = 10\text{mA}$				
at $I_F = 20\text{mA}$				
Peak Reverse Current	I_R	-	5	μA
at $V_R = 75\text{V}$			50	μA
at $V_R = 20\text{V}, T_A = 150^\circ\text{C}$			25	nA
Diode Capacitance	C_O	-	4	pF
at $V_R = 0, f = 1\text{MHz}$				
Reverse Recovery Time	T_{RR}	-	4	nS
at $I_F = 10\text{mA}$ to $I_R = 1\text{mA}, V_R = 6\text{V}, R_L = 100\Omega$				

Note 1: Valid provided that lead are kept at ambient temperature at a distance of 8 mm.



SEMTECH ELECTRONICS LTD.

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