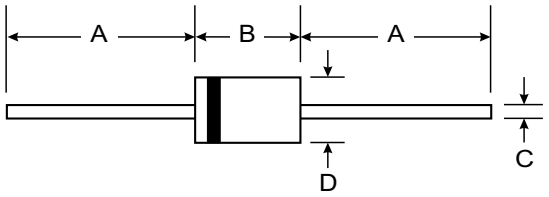
1N914 / 1N914A / 1N914B

FAST SWITCHING DIODE

Features

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



Mechanical Data

- Case: DO-35, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Marking: Type Number
- Weight: 0.013 grams (approx.)

DO-35		
Dim	**Min**	**Max**
A	25.40	—
B	—	4.00
C	—	0.60
D	—	2.00
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	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
Forward Continuous Current (Note 1) 1N914 1N914A/B	I_{FM}	 150 300	mA
Average Rectified Output Current (Note 1) 1N914 1N914A/B	I_O	 75 200	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0s 1N914 @ t = 1.0μs 1N914A/B @ t = 1.0μs	I_{FSM}	1.0 1.0 4.0	A
Power Dissipation (Note 1) Derate Above 25°C	P_d	500 1.68	mW mW/°C
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	300	K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +175	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic		Symbol	Min	Max	Unit	Test Condition
Maximum Forward Voltage	1N914B 1N914B 1N914 1N914A	V_{FM}	0.62 — — —	0.72 1.0 1.0 1.0	V	I_F = 5.0mA I_F = 100mA I_F = 10mA I_F = 20mA
Maximum Peak Reverse Current		I_{RM}	—	5.0 50 25	μA μA nA	V_R = 75V V_R = 20V, T_j = 150°C V_R = 20V
Capacitance		C_j	—	4.0	pF	V_R = 0, f = 1.0MHz
Reverse Recovery Time		t_{rr}	—	4.0	ns	I_F = 10mA to I_R =1.0mA V_R = 6.0V, R_L = 100Ω

Notes: 1. Valid provided that lead are kept at ambient temperature at a distance of 8.0mm.

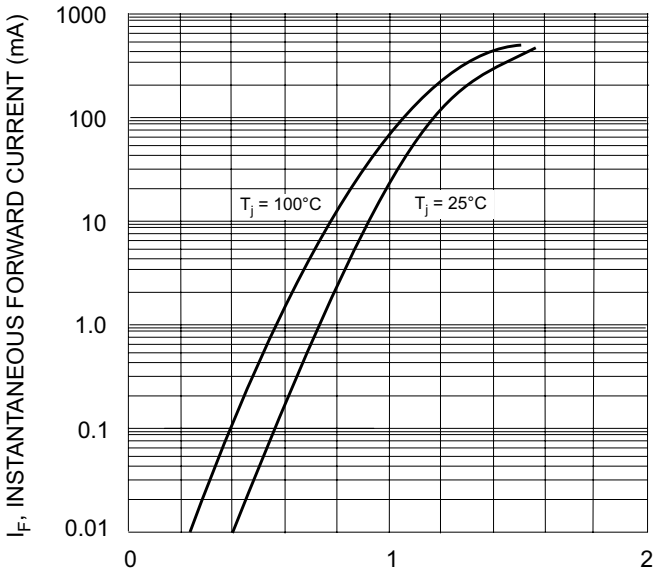


Fig. 1 Forward Characteristics 1N914, 1N914A

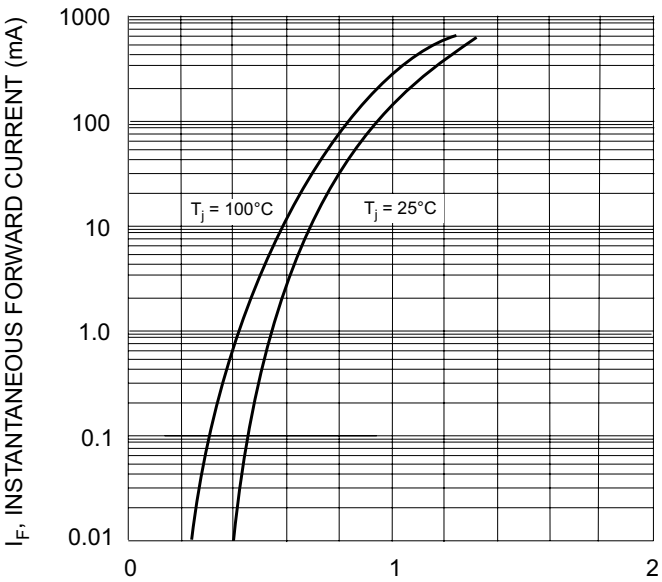


Fig. 2 Forward Characteristics 1N914B

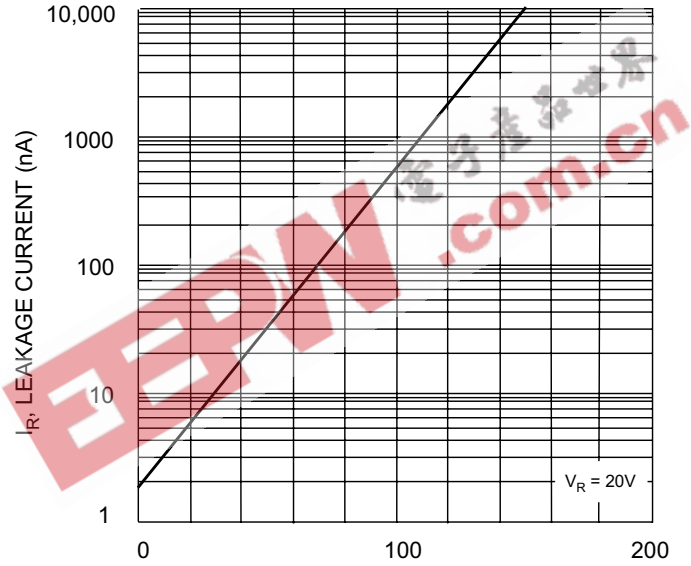


Fig. 3 Leakage Current vs Junction Temperature