



# 1N916B

## SMALL SIGNAL DIODE

### Features

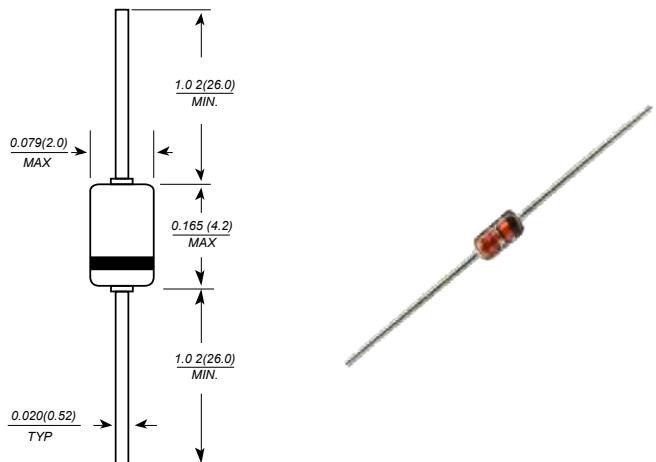
- Fast Switching
- High Reliability
- High Conductance

### Mechanical Data

- Case: DO-35, Plastic
- Leads: Solderable per MIL-STD-202, Method 208
- Marking: Type Number
- Polarity: Cathode Band
- Weight: 0.13 grams (approx.)



### DO-35(GLASS)



Dimensions in millimeters

### Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Units
$V_{RRM}$	Maximum Repetitive Reverse Voltage	100	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
$I_{FSM}$	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	1.0 4.0	A A
$T_{stg}$	Storage Temperature Range	-65 to +200	°C
$T_J$	Operating Junction Temperature	175	°C

NOTES:

1) These ratings are based on a maximum junction temperature of 200 degrees C.

2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

### Thermal Characteristics

Symbol	Characteristic	Max	Units
		1N916B	
$P_D$	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	300	°C/W



**SUNMATE**

## Typical Characteristics

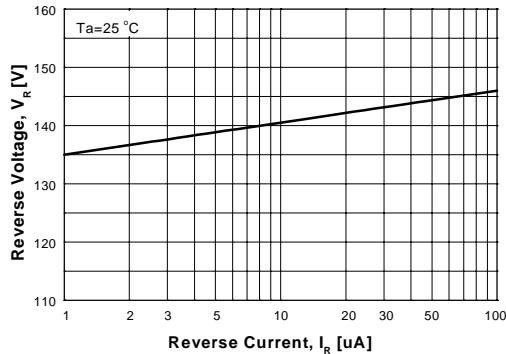
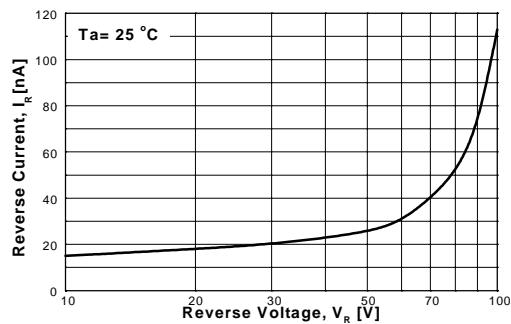


Figure 1. Reverse Voltage vs Reverse Current  
BV - 1.0 to 100 uA



GENERAL RULE: The Reverse Current of a diode will approximately double for every ten (10) Degree C increase in Temperature  
Figure 2. Reverse Current vs Reverse Voltage  
IR - 10 to 100 V

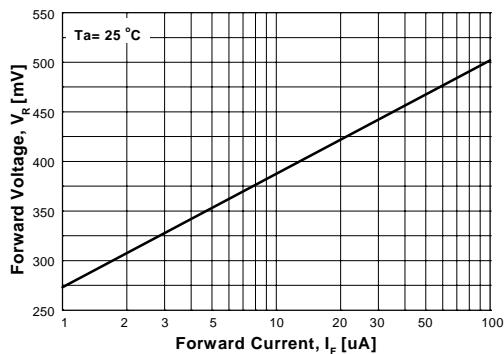


Figure 3. Forward Voltage vs Forward Current  
VF - 1 to 100 uA

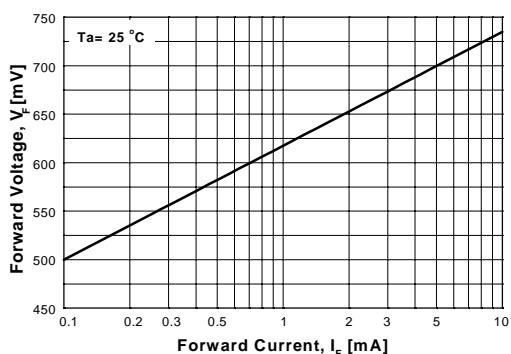


Figure 4. Forward Voltage vs Forward Current  
VF - 0.1 to 10 mA

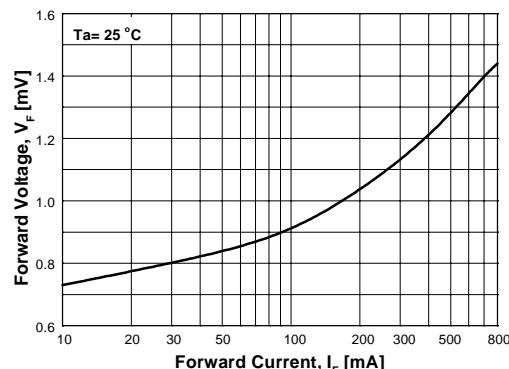
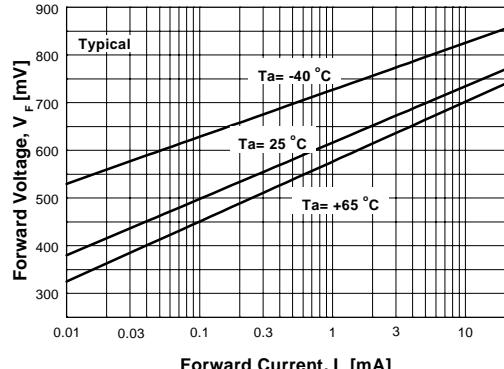
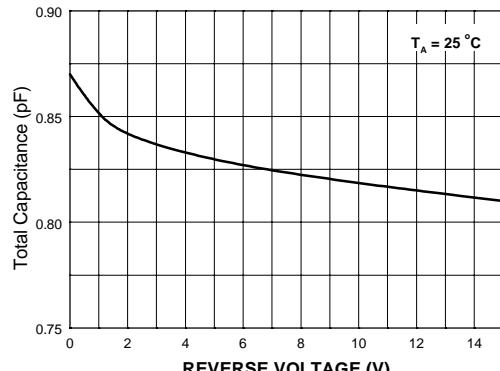


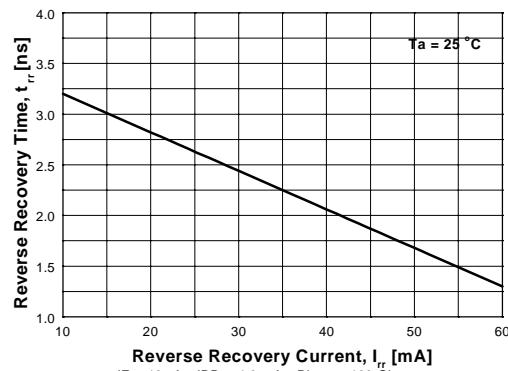
Figure 5. Forward Voltage vs Forward Current  
VF - 10 to 800 mA



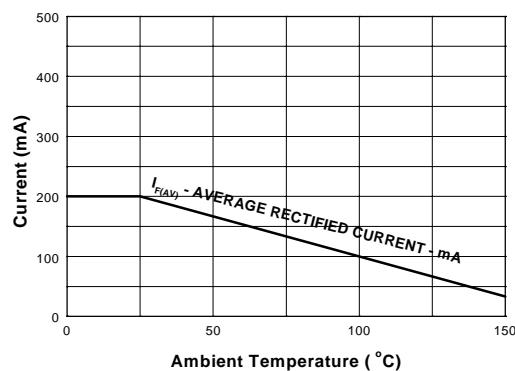
Typical  
Figure 6. Forward Voltage  
vs Ambient Temperature  
VF - 0.01 - 20 mA (-40 to +65 Deg C)



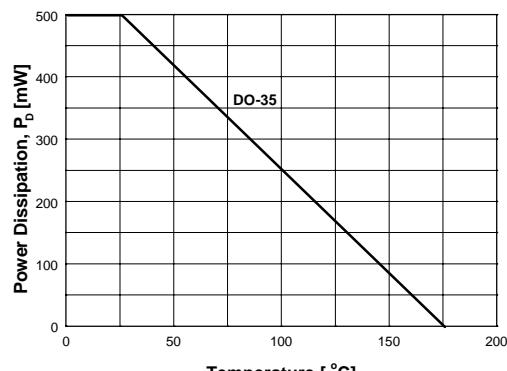
**Figure 7. Total Capacitance**



**Figure 8. Reverse Recovery Time vs Reverse Recovery Current**



**Figure 9. Average Rectified Current ( $I_{F(AV)}$ ) versus Ambient Temperature ( $T_A$ )**



**Figure 10. Power Derating Curve**