



Micro Commercial Components

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# 1N916(A)(B)

## 500mW 100 Volt Small Signal Diodes

### Features

- Moisture Sensitivity: Level 1 per J-STD-020C
- Low Current Leakage
- Compression Bond Construction
- Low Cost
- Marking : Cathode band and type number
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

### Maximum Ratings

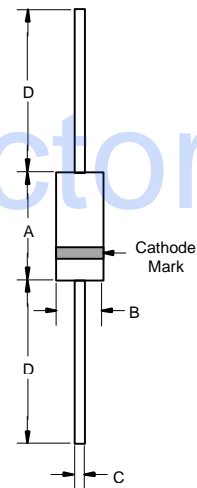
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 300°C/W Junction To Ambient

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Peak Reverse Voltage	$V_{RM}$	100V	
Average Rectified Forward Current	$I_{F(AV)}$	200mA	
Power Dissipation	$P_{TOT}$	500mW	
Junction Temperature	$T_J$	150°C	
Peak Forward Surge Current	$I_{FSM}$	1.0A 4.0A	Pulse Width=1.0s Pulse Width=1.0ms
Breakdown Voltage	$V_R$	100 75	$I_R=100\mu A$ $I_R=5.0\mu A$
Maximum Instantaneous Forward Voltage	$V_F$	1.0V 1.0V 1.0V 730mV	$T_J = 25^\circ C^*$ $I_{FM} = 10mA;$ $I_{FM} = 20mA;$ $I_{FM} = 20mA;$ $I_{FM} = 5.0mA;$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	25nA 5.0uA 50uA	$T_J=25^\circ C, V_R=20V$ $V_R=75V,$ $V_R=20V,$ $T_J=150^\circ C$
Typical Junction Capacitance	$C_T$	2.0pF	Measured at 1.0MHz, $V_R=0$
Reverse Recovery Time	$T_{rr}$	4.0nS	$I_F=10mA$ $V_R = 6V, I_{rr}=1.0mA$ $R_L=100 OHM$

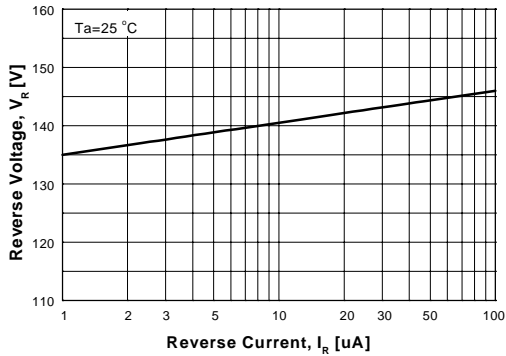
Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 5.

### DO-35

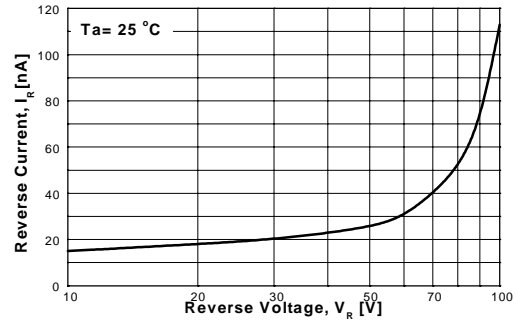


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	---	.166	---	4.2	
B	---	.079	---	2.00	
C	---	.020	---	.52	
D	1.000	---	25.40	---	

# 1N916(A)(B)

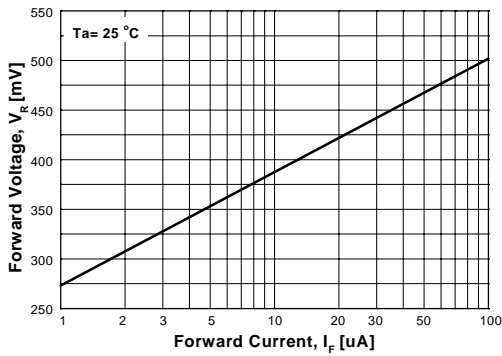


**Figure 1. Reverse Voltage vs Reverse Current**  
BV - 1.0 to 100 uA

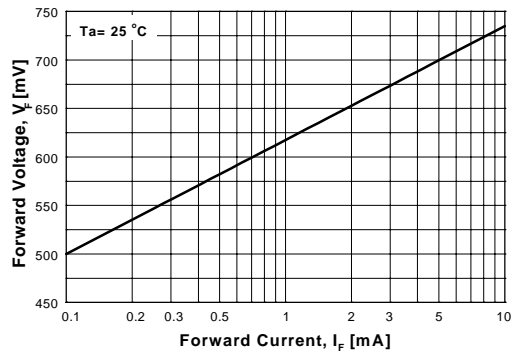


**Figure 2. Reverse Current vs Reverse Voltage**  
IR - 10 to 100 V

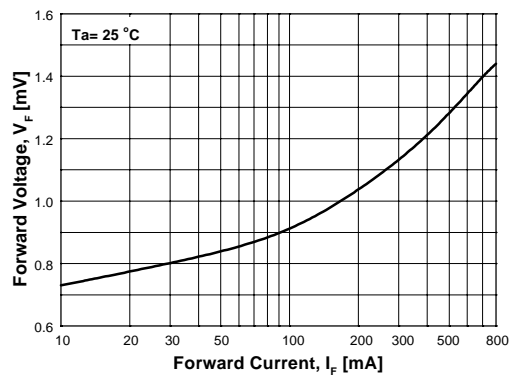
GENERAL RULE: The Reverse Current of a diode will approximately double for every ten (10) Degree C increase in Temperature



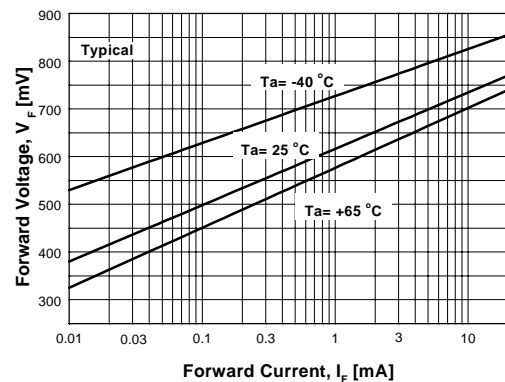
**Figure 3. Forward Voltage vs Forward Current**  
VF - 1 to 100 uA



**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



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

# 1N916(A)(B)

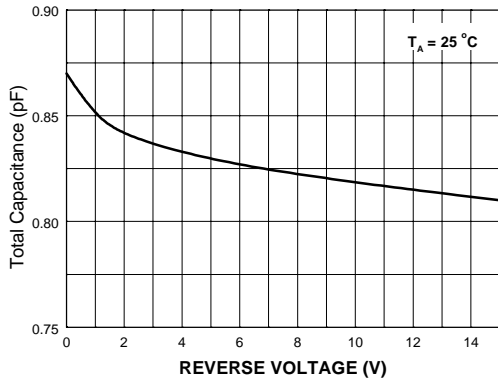


Figure 7. Total Capacitance

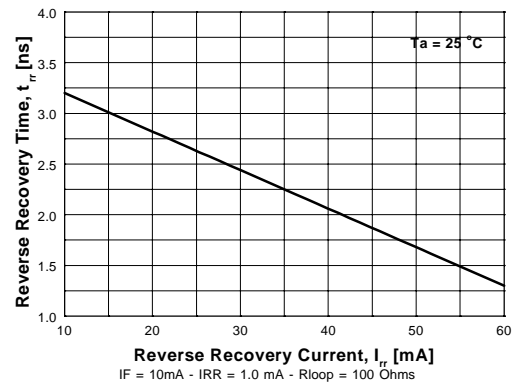


Figure 8. Reverse Recovery Time vs Reverse Recovery Current

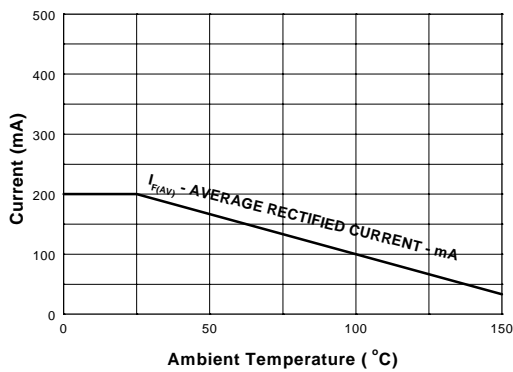


Figure 9. Average Rectified Current ( $I_{F(AV)}$ ) versus Ambient Temperature ( $T_A$ )

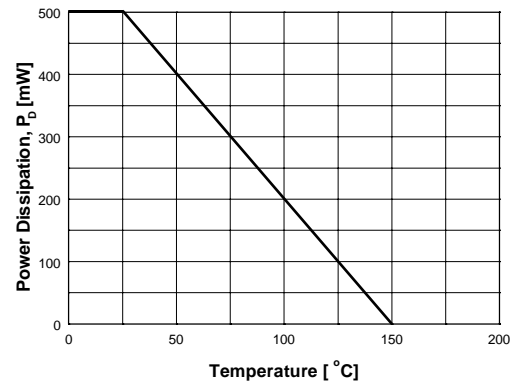


Figure 10. Power Derating Curve



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## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel; 10Kpcs/Reel
(Part Number)-AP	Ammo Packing;5Kpcs/AmmoBox
(Part Number)-BP	Bulk;500pcs/Bag

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