



Micro Commercial Components

Micro Commercial Components
 20736 Marilla Street Chatsworth
 CA 91311
 Phone: (818) 701-4933
 Fax: (818) 701-4939

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

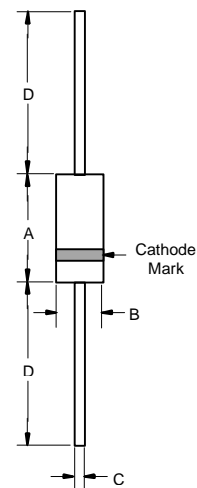
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 300°C/W Junction To Ambient

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)

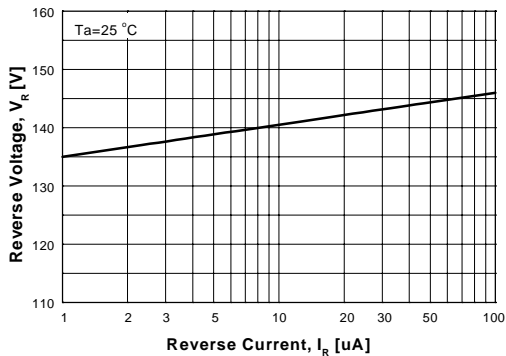


Figure 1. Reverse Voltage vs Reverse Current
BV - 1.0 to 100 uA

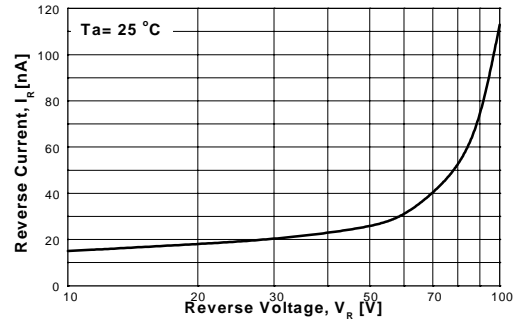


Figure 2. Reverse Current vs Reverse Voltage
IR - 10 to 100 V

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

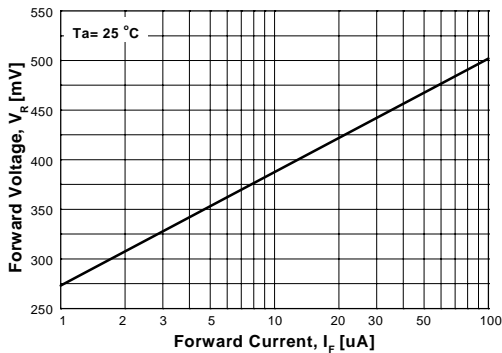


Figure 3. Forward Voltage vs Forward Current
VF - 1 to 100 uA

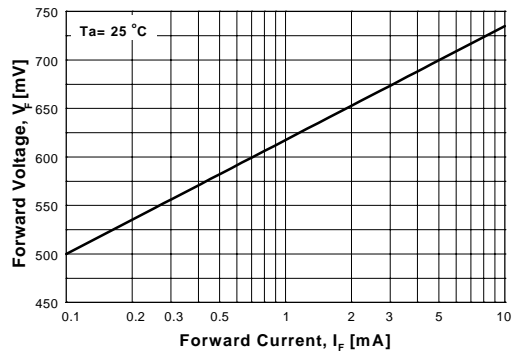


Figure 4. Forward Voltage vs Forward Current
VF - 0.1 to 10 mA

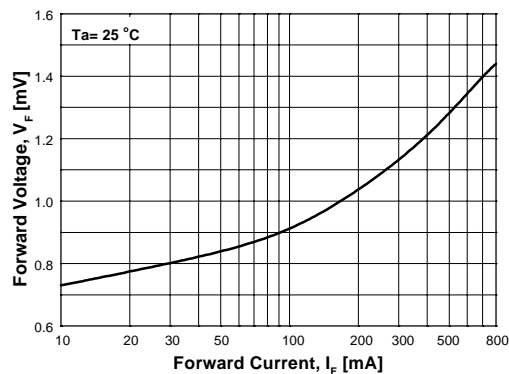


Figure 5. Forward Voltage vs Forward Current
VF - 10 to 800 mA

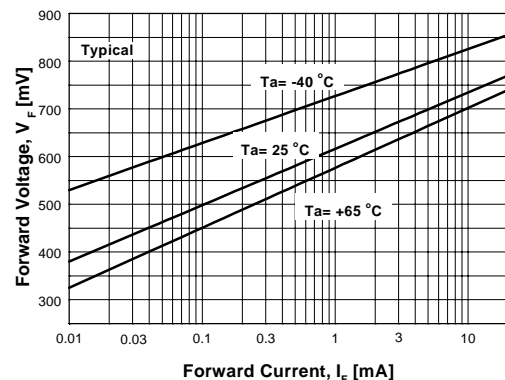


Figure 6. Forward Voltage vs Ambient Temperature
VF - 0.01 - 20 mA (-40 to +65 Deg C)

1N916(A)(B)

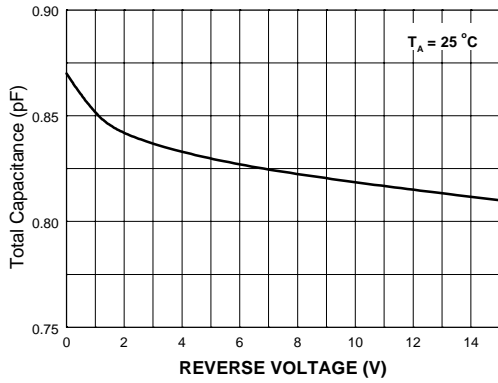


Figure 7. Total Capacitance

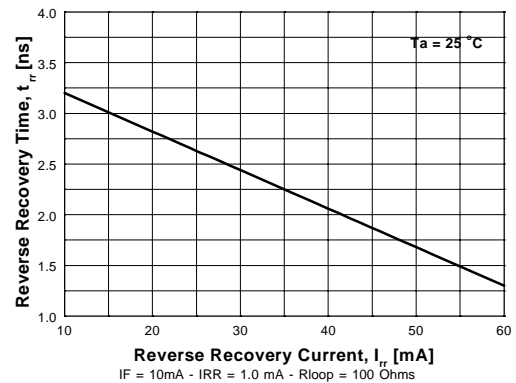


Figure 8. Reverse Recovery Time vs Reverse Recovery Current

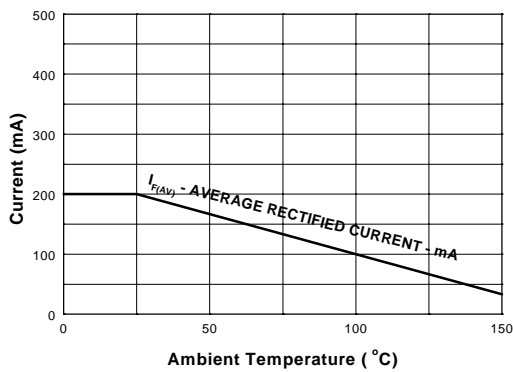


Figure 9. Average Rectified Current ($I_{F(AV)}$) versus Ambient Temperature (T_A)

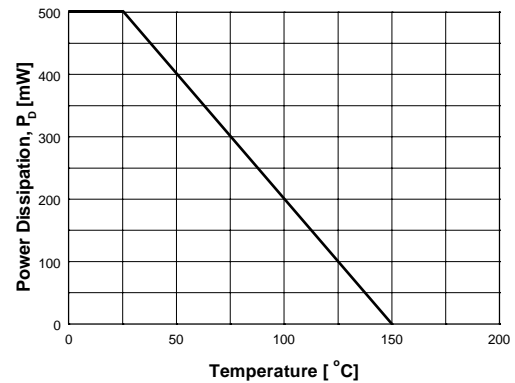


Figure 10. Power Derating Curve



Micro Commercial Components

Ordering Information

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

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. *Micro Commercial Components Corp.* does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

APPLICATIONS DISCLAIMER

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.