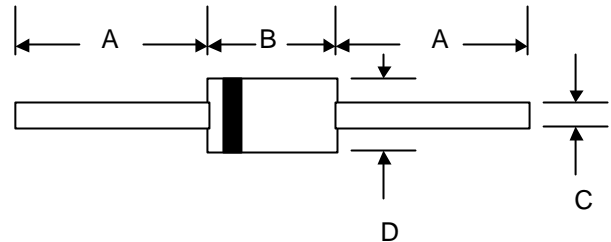


Data Sheet 2728, Rev. -

Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Low Power Loss
- Fast Recovery Time
- High Surge Current Capability



Mechanical Data

- Case: Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Mounting Position: Any
- Weight: 0.21 grams (approx.)

DO-201AD				
Dim	Min	Max	Min	Max
A	25.4	—	1.000	—
B	8.50	9.50	0.335	0.374
C	1.20	1.30	0.047	0.051
D	5.0	5.60	0.197	0.220
All	In mm		In inch	

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

Characteristic	Symbol	MR850	MR851	MR852	MR854	MR856	MR858	Unit
Peak Repetitive Reverse Voltage	V_{RRM}							V
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	
DC Blocking Voltage	V_R							
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	V
Average Rectified Output Current @ $T_L = 75^\circ\text{C}$	I_o	3.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150						A
Forward Voltage @ $I_F = 3.0\text{A}$	V_{FM}	1.25				1.30		V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_{RM}	10 200						μA
Reverse Recovery Time (Note 1)	t_{rr}	100				150		nS
Typical Junction Capacitance (Note 2)	C_j	80						pF
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150						$^\circ\text{C}$

Note: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $t_r = 0.25\text{A}$,
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.

Data Sheet 2728, Rev. -

RATINGS AND CHARACTERISTIC CURVES (MR850-MR858)

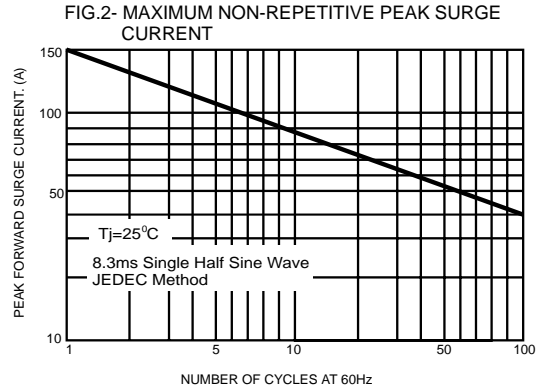
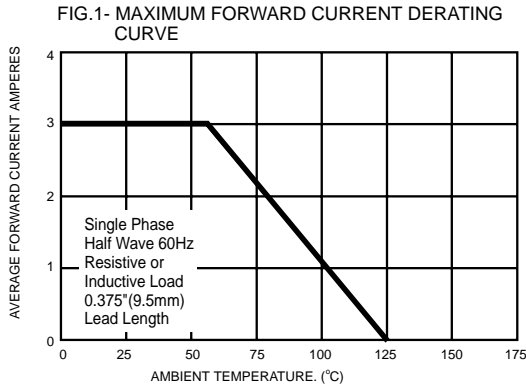


FIG.3- TYPICAL FORWARD CHARACTERISTICS

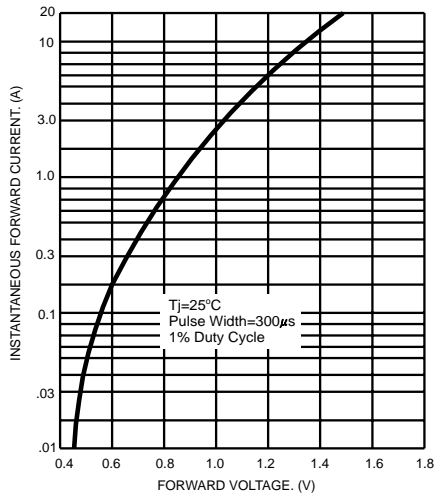


FIG.4- TYPICAL JUNCTION CAPACITANCE

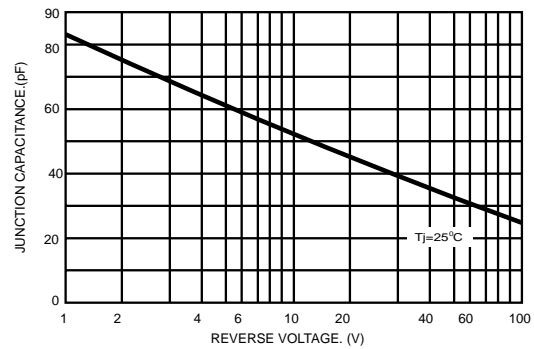
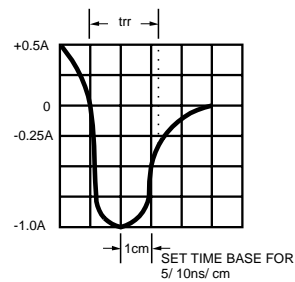
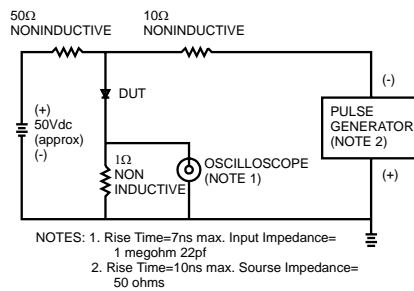


FIG.5- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



TECHNICAL DATA

DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the Sensitron Semiconductor sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall Sensitron Semiconductor be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). Sensitron Semiconductor assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall Sensitron Semiconductor be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or Sensitron Semiconductor.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of Sensitron Semiconductor.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.