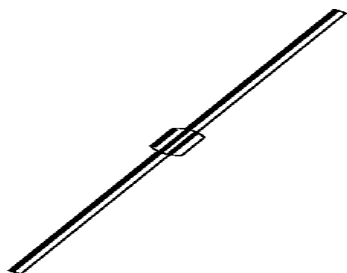


## SOFT RECOVERY, FAST SWITCHING PLASTIC RECTIFIERS

MR850 - MR856

**DO-201AD**  
Axial Lead Plastic  
Package



Maximum Ratings (Ratings at  $T_a = 25^\circ\text{C}$  ambient temperature unless specified otherwise.  
Resistive or inductive load, 60Hz)

DESCRIPTION	SYMBOL	MR850	MR851	MR852	MR854	MR856	UNIT
Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	V
RMS Voltage	$V_{RMS}$	35	70	140	280	420	V
DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	V
Average Forward Current 0.375" (9.5mm) Lead Length @ $T_a=50^\circ\text{C}$	$I_{(AV)}$	3.0					A
Peak Forward Surge Current 10ms Single Half Sine-Wave Superimposed on Rated Load	$I_{FSM}$	100					A
Repetitive Peak Forward surge (Note 1)	$I_{FRM}$	1.0					A
Forward Voltage @ 3.0A	$V_F$	1.25					V
Dc Reverse Current @ $T_a=25^\circ\text{C}$	$I_R$	10					$\mu\text{A}$
Rated DC Blocking Voltage @ $T_a=100^\circ\text{C}$		500					$\mu\text{A}$
Reverse Recovery Time (Note 2)	$T_{RR}$	150					ns
Typical Junction Capacitance (Note 3)	$C_j$	60					pF
Typical Thermal Resistance Junction to Ambient (Note 4)	$R_{th(j-a)}$	15					$^\circ\text{C/W}$
Operating Junction Temperature	$T_j$	- 55 to +125					$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to +150					$^\circ\text{C}$

Notes 1. Repetitive Peak Forward Surge Current @  $f < 15\text{KHz}$

2. Reverse Recovery Test Conditions :  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{RR} = 0.25\text{A}$

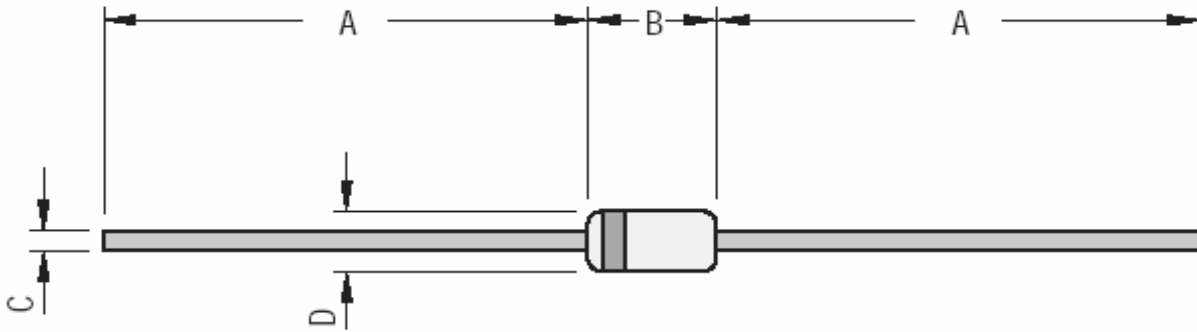
3. Measured @ 1MHz and Applied Reverse Voltage Of 4.0 V

4. Thermal Resistance from Junction to ambient and from junction to Lead Length "0.375" (9.5mm) P.C.B.  
mounted

MR850\_856Rev110105E

**DO-201AD**  
**Axial Leaded Plastic**  
**Package**

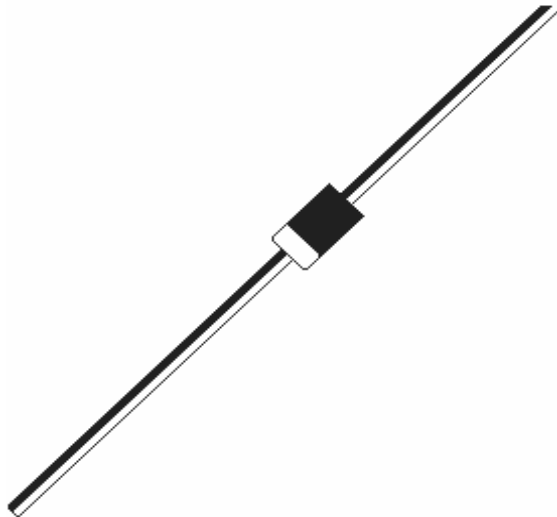
**DO-201AD Axial Plastic Package**



Cathode is marked by a Band

DIM	Min	Max
A	25.40	
B	7.20	9.50
C	1.20	1.30
D	5.00	5.60

All Dimensions are in mm



**Component Disposal Instructions**

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

**Disclaimer**

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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