





An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

SOFT RECOVERY, FAST SWITCHING PLASTIC RECTIFIERS

MR850 - MR856





Maximum Ratings (Ratings at $T_a = 25^{\circ}C$ ambient temperature unless specified oterwise. 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°C | I _(AV) | 3.0 | | | Α | | |
| Peak Forward Surge Current 10ms Single Half Sine-Wave Superimposed on Rated Load | I _{FSM} | 100 | | | Α | | |
| Repetitive Peak Forward surge (Note 1) | I _{FRM} | 1.0 | | | Α | | |
| Forward Voltage @ 3.0A | V_{F} | 1.25 | | | V | | |
| Dc Reverse Current @ T _a =25°C | I _R | 10 | | | | | μΑ |
| Rated DC Blocking Voltage @ T _a =100°C | | 500 | | | | | μΑ |
| 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 | | | | °C/W | |
| Operating Junction Temperature | T _j | - 55 to +125 | | | | ٥C | |
| Storage Temperature Range | T _{stg} | - 55 to +150 | | | °C | | |

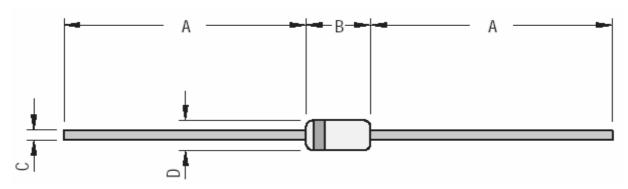
Notes 1. Repetitive Peak Forward Surge Current @ f <15KHz

- 2. Reverse Recovery Test Conditions : I_{F} = 0.5A, I_{R} = 1.0A, I_{RR} = 0.25A
- 3. Measured @ 1MHz and Applied Reverse Voltage 0f 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



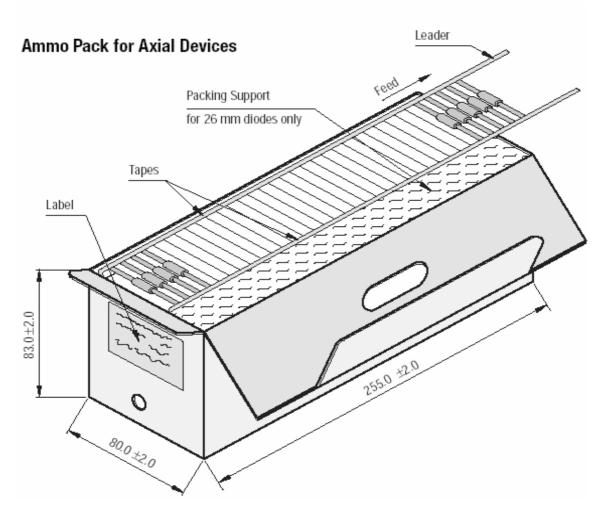
Cathode is marked by a Band

| DIM | Min | Max |
|-----|-------|------|
| Α | 25.40 | |
| В | 8.50 | 9.50 |
| С | 1.20 | 1.30 |
| D | 2.00 | 2.70 |

All Dimensions are in mm



AMMO PACKING FOR DO-201AD



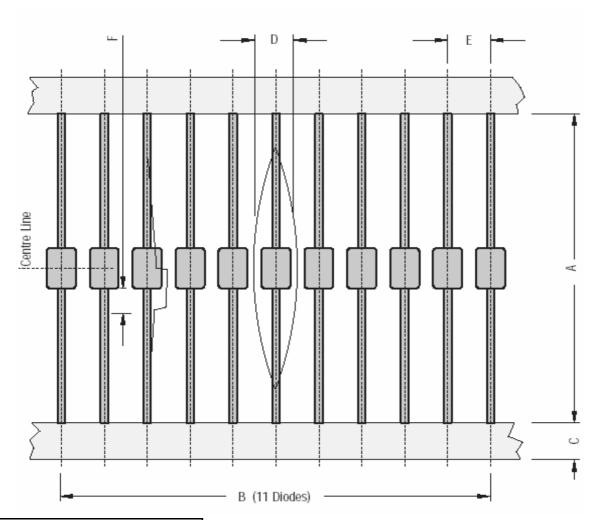
All Dimensions are in mm

Packaging Information

| Package/ | Packaging Type | Std. Packing | Inner Carton | | | | Outer Carton | | | |
|-----------|----------------|--------------|--------------|----------------|--------------|-------|----------------|--------------|--|--|
| Case Type | | Qty | Qty | Size L x W x H | Gross Weight | Qty | Size L x W x H | Gross Weight | | |
| | | | | (cm) | (Kg) | | (cm) | (Kg) | | |
| DO-201AD | T&A | 1,200 | 1.2K | 29 x 8 x 15 | 1.68 | 10.8K | 46 x 36 x 25 | 15.3 | | |

T & A: Tape and Ammo Pack

AXIAL TAPE FOR DO-201AD



| DO-201AD 52 mm Tape | | | | | |
|---------------------|------|-------|--|--|--|
| DIM | Min | Max | | | |
| Α | 50.0 | 54.0 | | | |
| В | 95.0 | 105.0 | | | |
| С | 5.60 | 6.50 | | | |
| D | | 1.5R | | | |
| E | 9.50 | 10.50 | | | |
| F | | 1.25 | | | |

All Dimensions are in mm

TAPE SPECIFICATIONS

- 1. 300 mm (Min) leader tape on every roll.
- 2. No. of empty places allowed 0.25% without consecutive empty places.
- 3. Ends of leads shall normally not protrude beyond the tapes.
- 4. Components shall be held sufficiently in the tape or tapes so that they can not come free in normal handling.

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).

Customer Notes

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 saying/support appliances or systems. CDIL customers selling these products (either as individual Discrete 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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