

**FAST RECOVERY RECTIFIERS**

**FR301 - FR307**

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



**Fast Switching for High Efficiency**

**Absolute Maximum Ratings (Ratings at  $T_a = 25^\circ\text{C}$  ambient temperature unless specified otherwise. Single phase ,half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.)**

**ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ )**

DESCRIPTION	SYMBOL	FR 301	FR 302	FR 303	FR 304	FR 305	FR 306	FR 307	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified current 0.375 " (9.5mm) lead length @ $T_a=55^\circ\text{C}$	$I_{(AV)}$	3.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	200							A
Maximum Forward Voltage at 1A DC	$V_F$	1.3							V
Maximum Reverse Current @ $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage	$I_R$	10							$\mu\text{A}$
Typical Junction Capacitance (Note 1)	$C_J$	65.5							pF
Maximum Reverse Recovery Time (Note 3)	$t_{rr}$	150			250		500		ns
Operating and Storage Temperature Range	$T_J, T_{stg}$	- 65 to +150							$^\circ\text{C}$

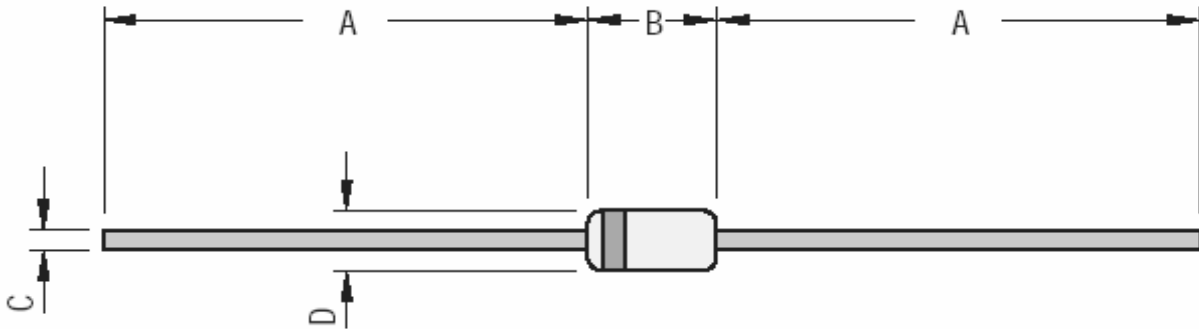
**NOTES:**

1. Measured at 1MHz and Applied Reverse Voltage of 4.0 VDC
2. Thermal Resistance Junction to Ambient and form Junction to Lead at "0.375" (9.5mm) Lead Length P.C.B Mounted
3. Reverse Recovery Test Conditions :  $I_F = 0.5\text{A}$ ,  $I_R = 1\text{A}$ ,  $I_{RR} = 0.25\text{A}$

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**DO-201AD Axial Plastic Package**



Cathode is marked by a Band

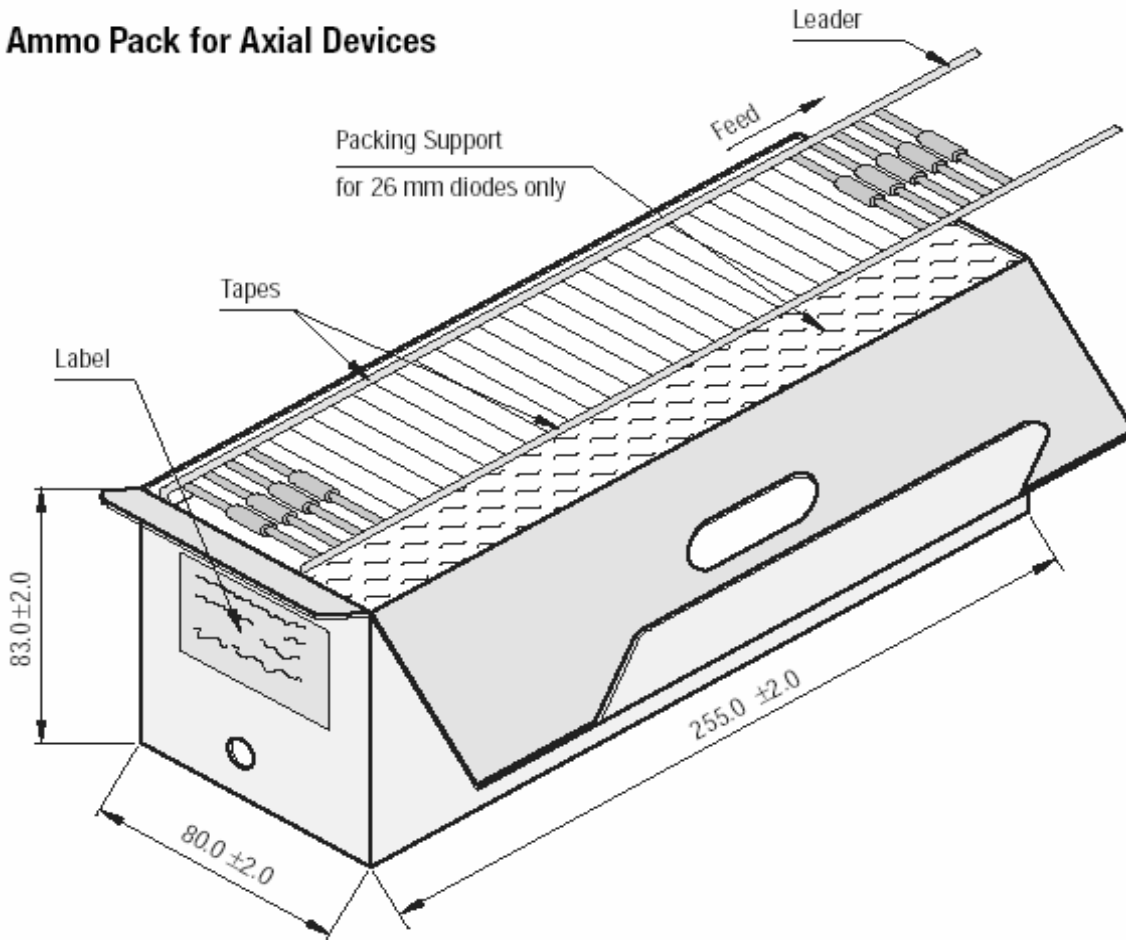
DIM	Min	Max
A	25.40	
B	8.50	9.50
C	1.20	1.30
D	2.00	2.70

All Dimensions are in mm



## AMMO PACKING FOR DO-201AD

## Ammo Pack for Axial Devices



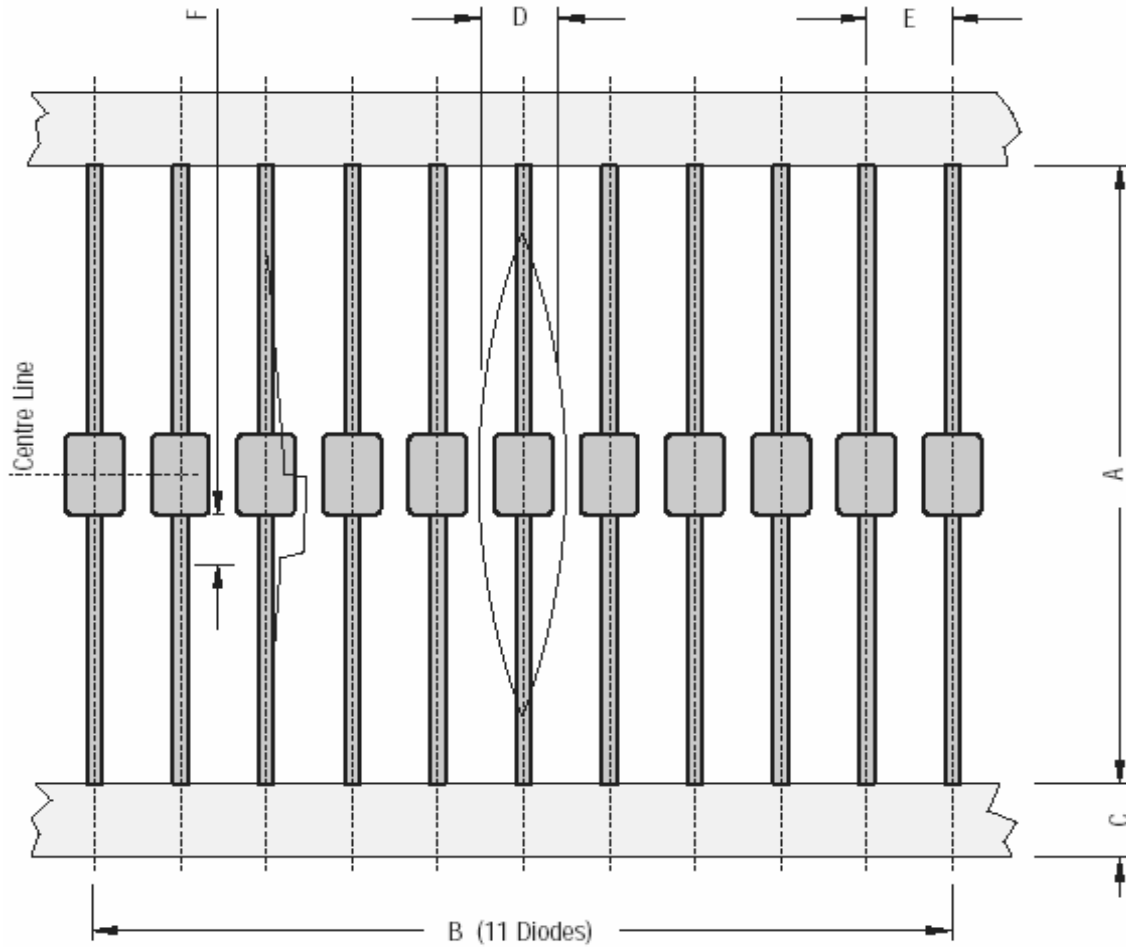
All Dimensions are in mm

## Packaging Information

Package/ Case Type	Packaging Type	Std. Packing Qty	Inner Carton			Outer Carton		
			Qty	Size L x W x H (cm)	Gross Weight (Kg)	Qty	Size L x W x H (cm)	Gross Weight (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
A	50.0	54.0
B	95.0	105.0
C	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 saving/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).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



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