

FAST RECOVERY RECTIFIERS

1N4933 - 1N4937

DO-41 (Plastic)
Axial Lead Plastic
Package



Axial-lead, fast-recovery rectifiers are designed for special applications such as DC power supplies, inverters, converters, ultrasonic systems, choppers, low RF interference and free wheeling diodes.

ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at $T_A = 25^\circ\text{C}$ unless specified otherwise. Single phase, half wave, 60Hz, resistive or inductive load.

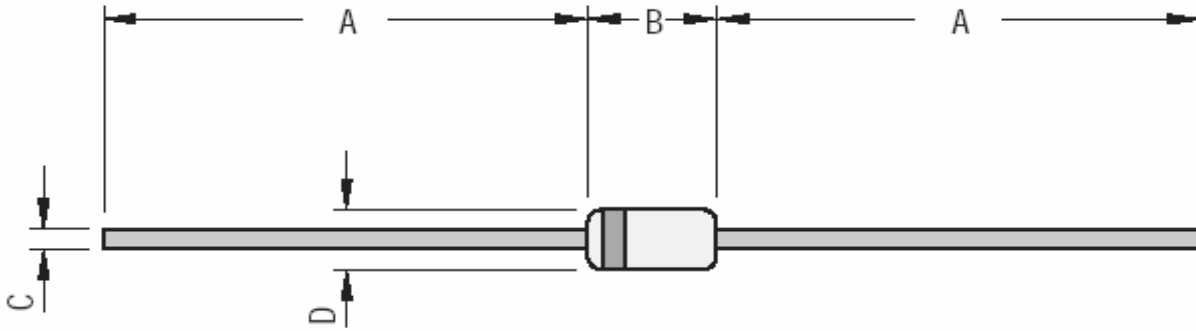
For capacitive load, derate current by 20%.)

DESCRIPTION	SYMBOL	1N4933	1N4934	1N4935	1N4936	1N4937	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length @ $T_a=75^\circ\text{C}$	$I_{F(AV)}$	1.0					A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method) @ $T_a=75^\circ\text{C}$	I_{FSM}	30.0					A
Maximum Instantaneous Forward Voltage @ 1.0A	V_F	1.3					V
Maximum DC Reverse Current @ rated DC Blocking Voltage	I_R	5.0					μA
Maximum Full Load Reverse Current Full Cycle Average 0.375" (9.5mm) lead length @ $T_L=55^\circ\text{C}$		100					
Maximum Reverse Recovery Time	$^*t_{rr}$	200					ns
Typical Junction Capacitance	$^{**}C_j$	15.0					pF
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 65 to +150					$^\circ\text{C}$

* Test Conditions : $I_F=1.0\text{A}$, $V_R=30\text{V}$, $di/dt=50\text{A/ms}$ and $I_{rr}=10\%I_{RM}$

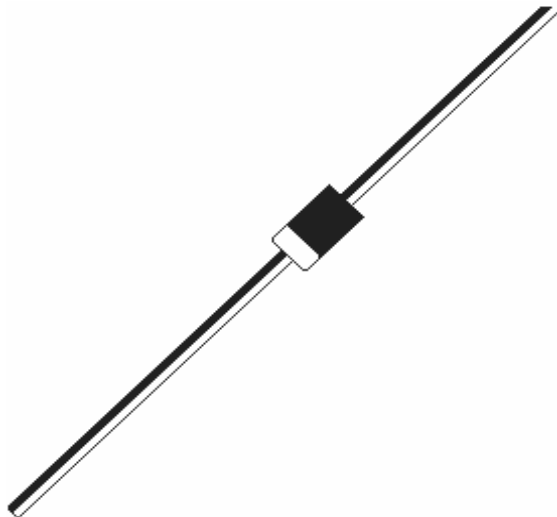
** Measured at 1MHz and applied reverse voltage of 4.0V

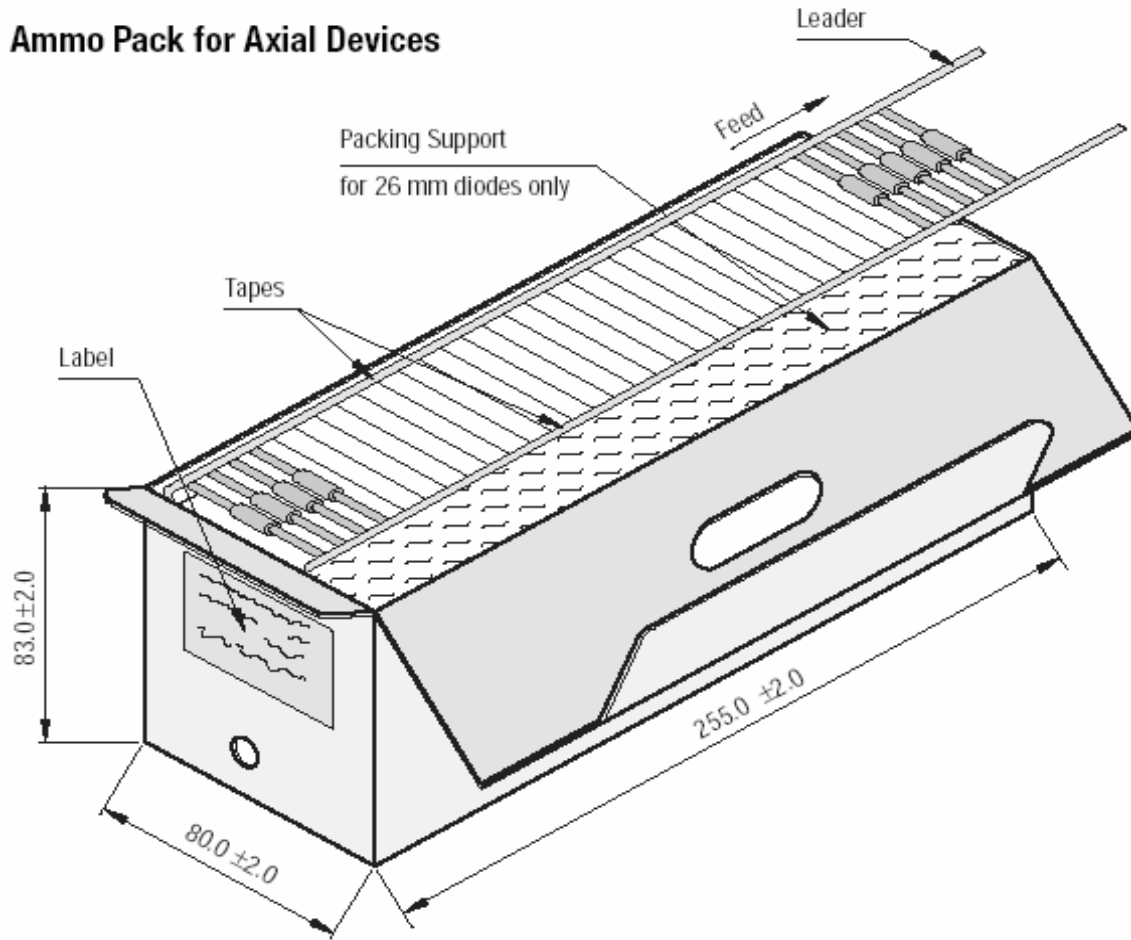
DO-41P Axial Plastic Package



DIM	Min	Max
A	25.40	
B	4.20	5.20
C	0.70	0.90
D	2.00	2.70

All Dimensions are in mm



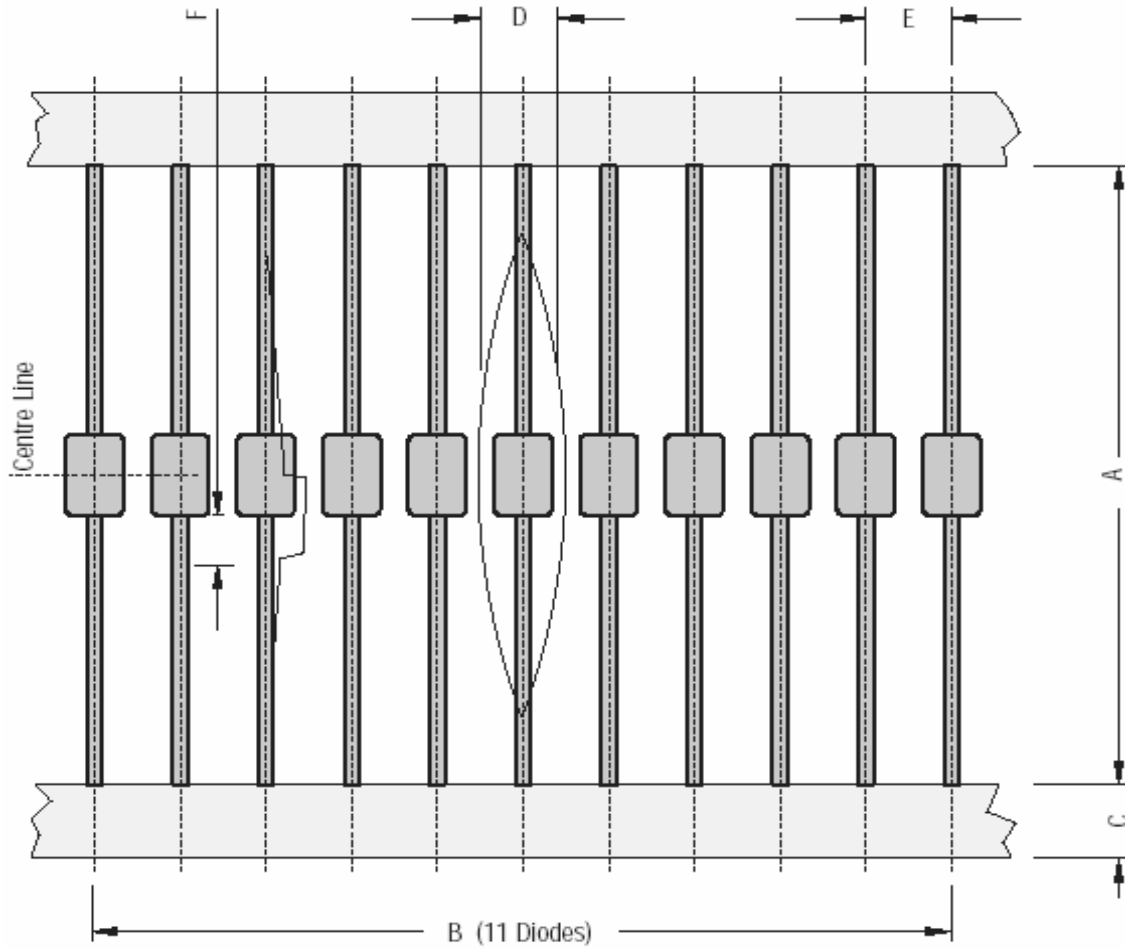
AMMO PACKING FOR DO-41P**Ammo Pack for Axial Devices**

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-41P	T&A	5,000	5K	27 x 8 x 14	1.96	45K	46 x 35 x 25	17.5

T & A: Tape and Ammo Pack



DO-41P 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

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

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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