Continental Device India Limited

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

FAST RECOVERY RECTIFIER

FR151- FR157

DO-15
Axial Lead Plastic Package

Fast Switching for High Efficiency

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at T_a=25°C Ambient Temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

DESCRIPTION	SYMBOL	FR151	FR152	FR153	FR154	FR155	FR156	FR157	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 at T_a=55ºC	$I_{F(AV)}$	1.5							A
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	50							A
Maximum Forward Voltage at 1.5A at 25ºC	V_F	1.3							V
Maximum Reverse Current at T_a=25°C	I_R	5.0							µA
at Rated DC Blocking Voltage T_a=100°C		500							µA
Typical Junction Capacitance	*C_J	25							pF
Typical Thermal Resistance	**$R_{th\ (j-a)}$	45							°C/W
Maximum Reverse Recovery Time	***T_{RR}	150				250	500		ns
Operating and Storage Temperature Range	T_J, T_{stg}	- 55 to +150							°C

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

**Thermal resistance junction to Ambient and from junction to lead length 0.375" (9.5mm) PCB mounted

***Reverse recovery test conditions I_F=0.5A, I_R=1A, I_{RR}=0.25A

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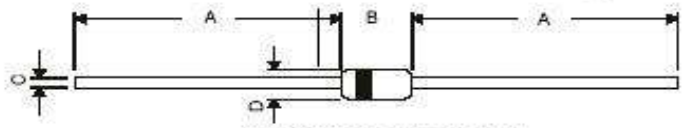
DO-15 Glass Axial Package

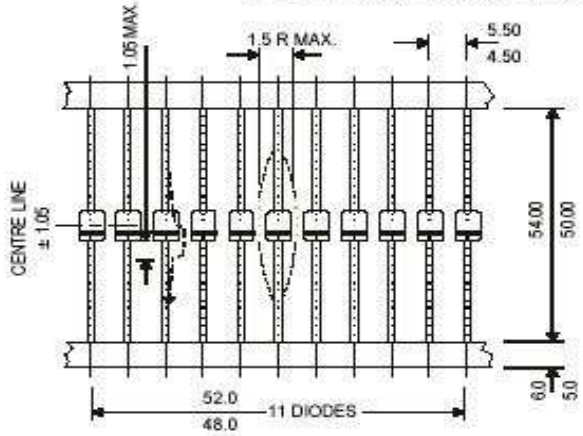


NOTE: Cathode is marked by Band.

DIM	MIN	MAX
A	25.40	—
B	5.8	7.5
C	0.7	0.9
D	2.6	3.6

All dimensions are in mm.

DO-15, 52mm Taping Specification

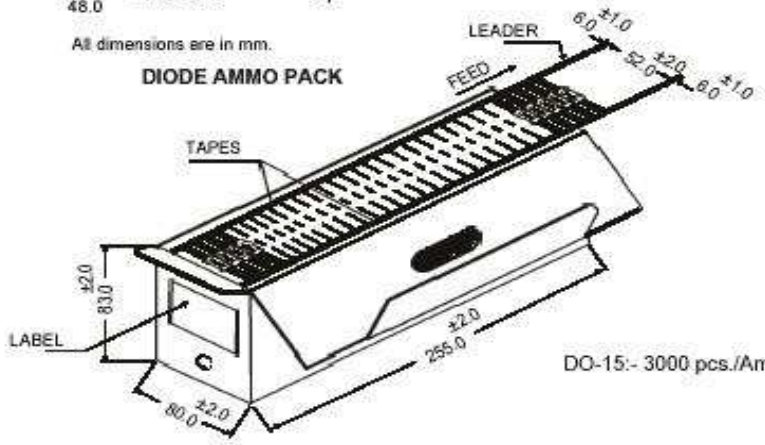


All dimensions are in mm.

52 mm Taping Specification

1. T & A indicates Axial Tape and Ammo Packing (52 mm Tape Spacing).
2. 300 mm (min) leader tape on every tape.
3. No. of empty places allowed 0.25% without consecutive empty places.
4. Ends of leads shall preferably not protrude beyond the tapes.
5. Components shall be held sufficiently in the tape or tapes so that they can not come free in normal handling.

DIODE AMMO PACK



DO-15:- 3000 pcs./Ammo Pack

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).

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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).

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

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