

FAST RECOVERY RECTIFIERS

FR101 - FR107



**DO-41P
Axial Lead 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 ($T_a=25^\circ\text{C}$)

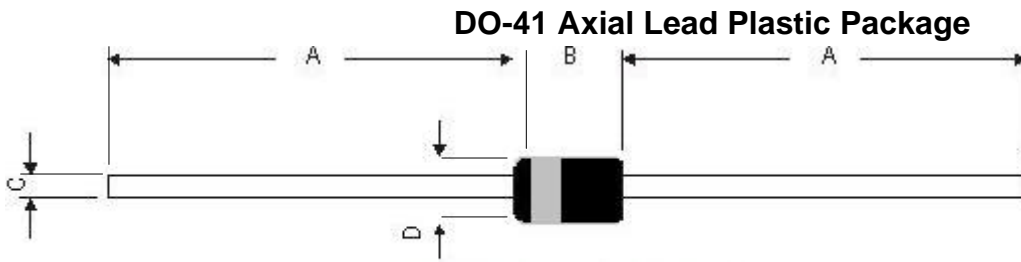
DESCRIPTION	SYMBOL	FR 101	FR 102	FR 103	FR 104	FR 105	FR 106	FR 107	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified current 0.375 " (9.5mm) lead length @ $T_a=55^\circ\text{C}$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30							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 $T_a=100^\circ\text{C}$	I_R	5.0							μA
		500							μA
Typical Junction Capacitance (Note 1)	C_J	12							pF
Typical Thermal Resistance from Junction to Ambient in free air (Note2)	$R_{th(j-a)}$	41							$^\circ\text{C/W}$
Maximum Reverse Recovery Time (Note 3)	t_{rr}	150				250	500		ns
Operating and Storage Temperature Range	T_J, T_{stg}	- 55 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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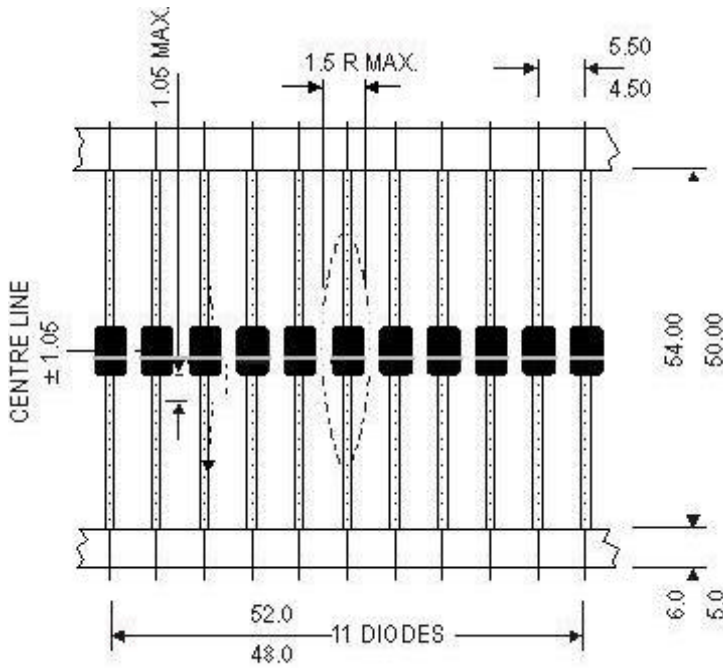


DIM	MIN	MAX
A	27.90	—
B	4.05	5.20
C	0.75	0.87
D	2.30	2.70

All dimensions are in mm.

NOTE: Cathode is marked by Band.

DO-41, 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.

Packing in Ammo Pack: 5000 pcs./Ammo Pack

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