

Fast Recovery Rectifier Diode

DO-201AD

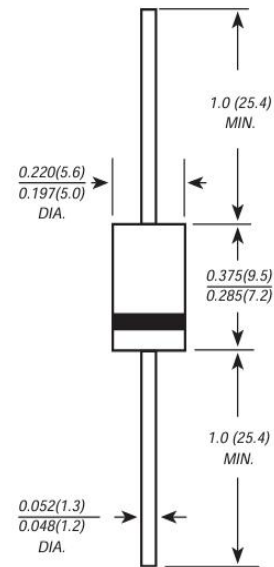
Parameter	Value	Unit
V_{RRM}	100~800	V
$I_{F(AV)}$	3.0	A

Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Fast switching for high efficiency

Applications

For use in fast switching rectification of power supply, inverters, converters and freewheeling diodes for consumer and telecommunication.



Dimensions in inches and (millimeters)

Electrical Characteristics (at $T_J = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	BY396	BY397	BY398	BY399	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	800	V
Maximum RMS Voltage	V_{RMS}	70	140	280	560	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	800	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length $T_a = 55^\circ\text{C}$	$I_{F(AV)}$	3.0				A
Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	100				A
Maximum Peak Forward Voltage at $I_F = 3.0\text{Amps}$.	V_F	1.25				V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$	I_R	10				μA
	$I_{R(H)}$	100				μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	250				ns
Typical Junction Capacitance (Note 2)	C_J	60				pF
Junction Temperature Range	T_J	- 65 to + 150				$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 65 to + 150				$^\circ\text{C}$

Notes :

- 1 .Reverse Recovery Test Conditions : $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$.
- 2 .Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC

Typical characteristics

Fig.1 - Reverse Recovery Time Characteristic And Test Circuit Diagram

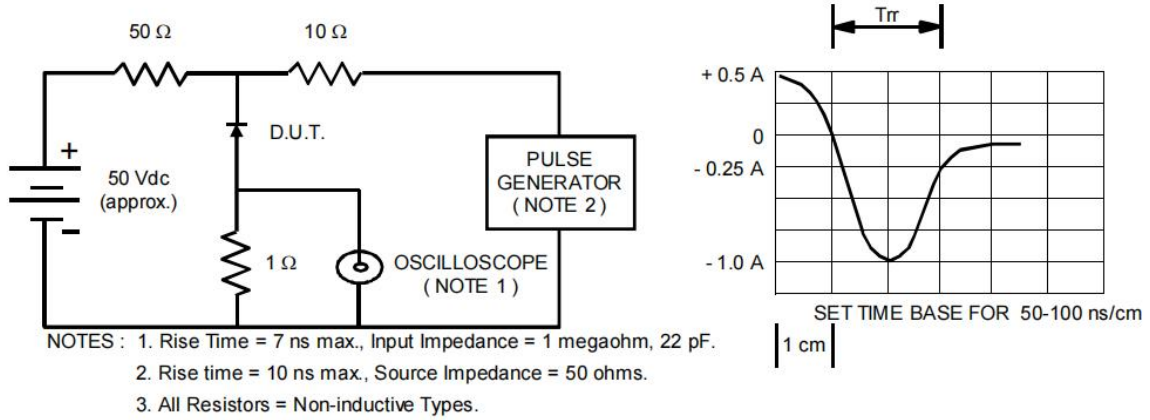


Fig.2 - Derating Curve For Output Rectified Current

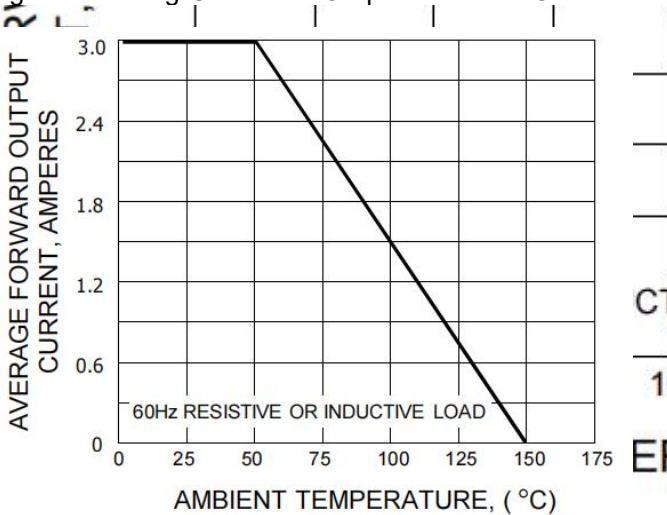


Fig.3 - Maximum Non-Repetitive Peak Forward Surge Current

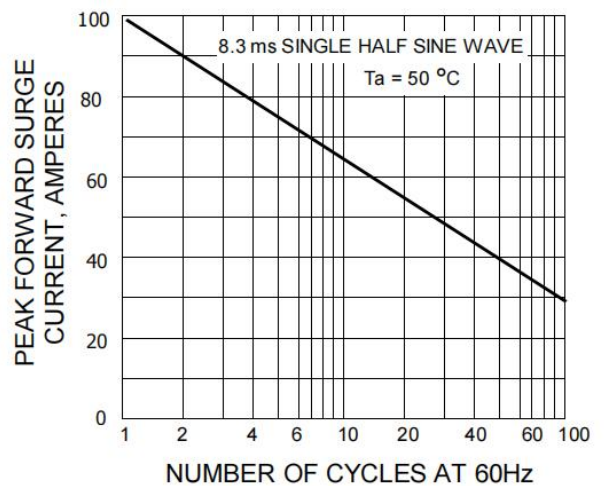


Fig.4 - Typical Forward Characteristics

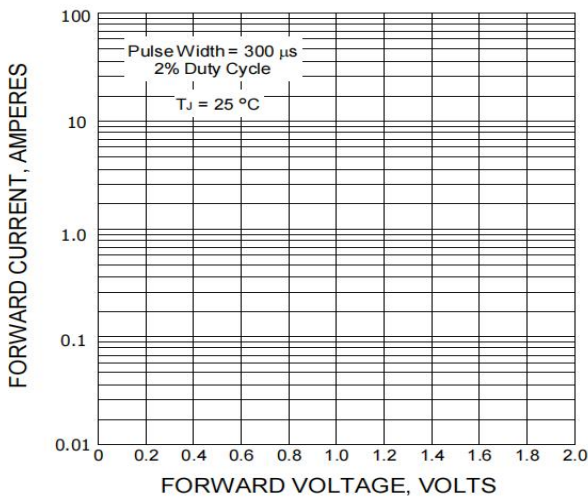
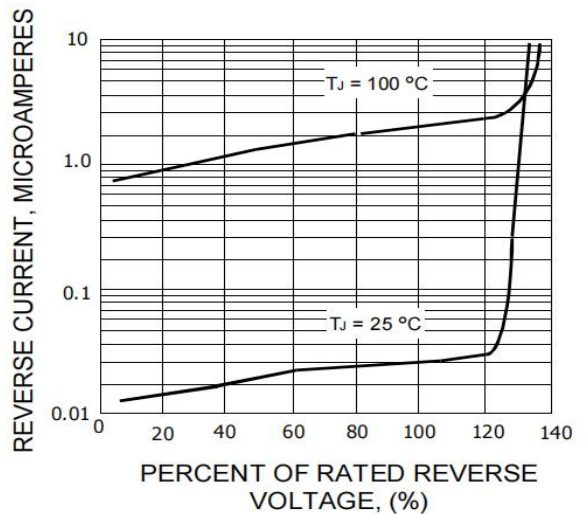


Fig.5 - Typical Reverse Characteristics



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