

Super Fast Silicon Rectifiers

Reverse Voltage - 600 V

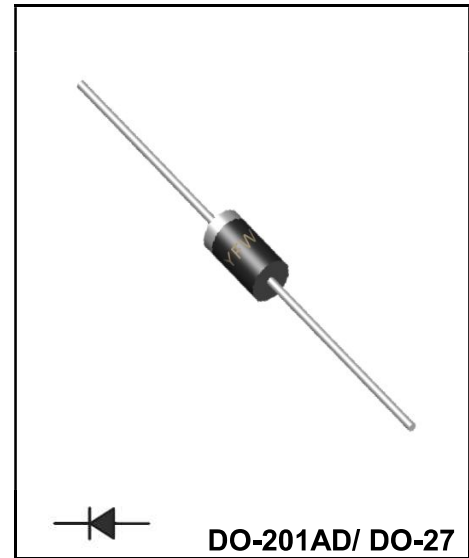
Forward Current – 10.0 A

FEATURES

- ◆For surface mounted applications
- ◆Low profile package
- ◆Open Junction chip
- ◆Ideal for automated placement
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆Case: DO-201AD/DO-27
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 0.98g / 0.0345oz



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	SRA6E	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current at $T_c = 100\text{ }^\circ\text{C}$	$I_{F(AV)}$	10.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	220.0	A
Maximum Instantaneous Forward Voltage at 10A	V_F	1.55	V
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 125\text{ }^\circ\text{C}$	I_R	10 100	μA
Maximum reverse recovery time ^(Note 1)	T_{rr}	30	nS
Typical Junction Capacitance ^(Note 2)	C_j	80.0	pF
Typical Thermal Resistance	$R_{\theta JA}$	50	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +175	$^\circ\text{C}$

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) Reverse recovery time test condition: $I_F=0.5\text{A}$ $I_R=1.0\text{A}$ $I_{rr}=0.25\text{A}$

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

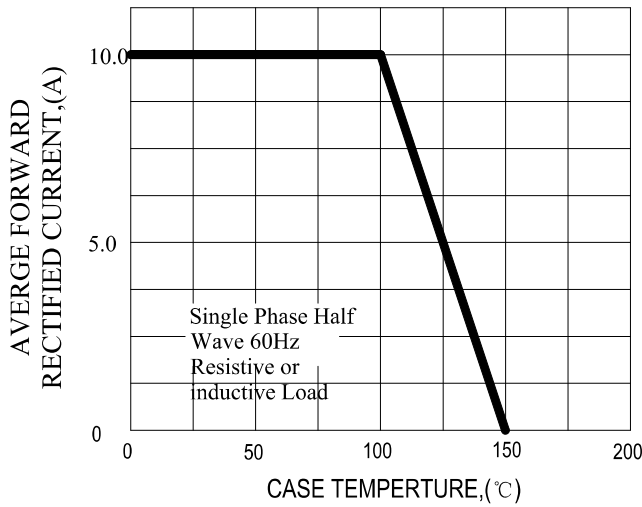


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

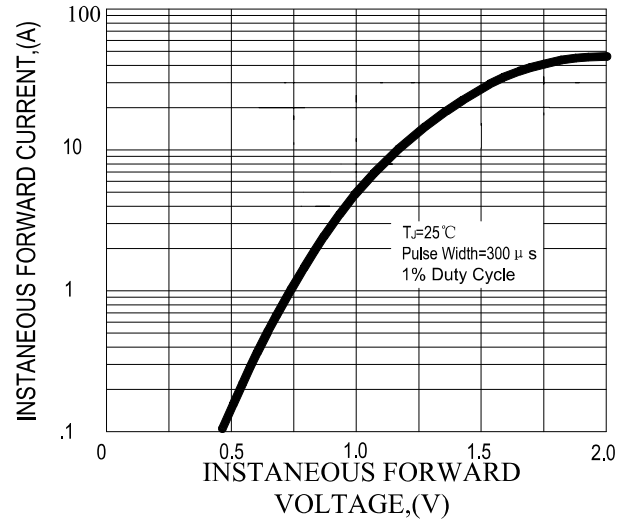


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

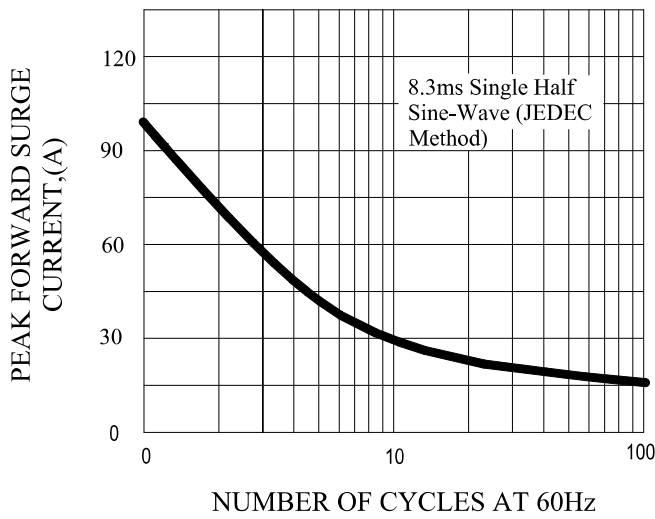


FIG.4-TYPICAL REVERSE CHARACTERISTICS

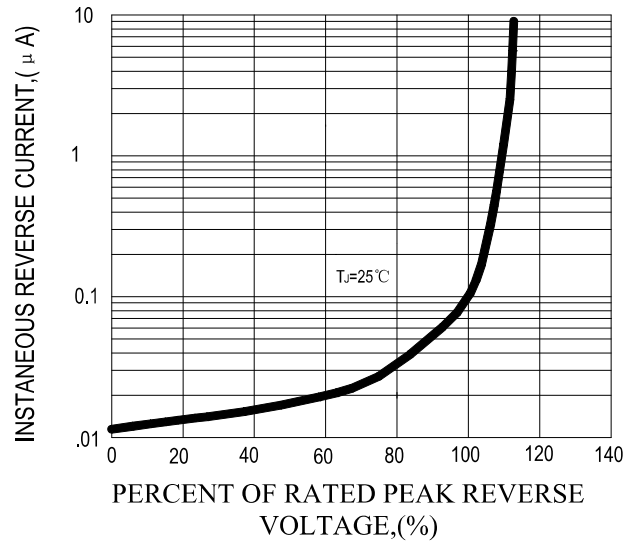
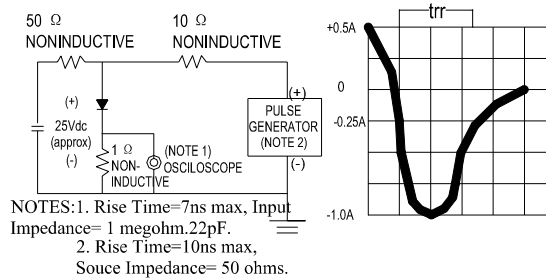


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



Ordering information

Package	Packing Description	Packing Quantity
DO-201AD/DO-27	bulk	250PCS/500PCS/Inner Box 25000PCS/Carton
	ammo pack	1000PCS/1250PCS/Inner Box 10000PCS/12500PCS/Carton

Package Dimensions

DO-201AD/DO-27

Dim.	Millimeter(mm)		INCHES	
	Min.	Max.	Min.	Max.
A	-	9.50	-	0.370
B	-	6.40	-	0.250
C	1.20	1.30	0.048	0.052
D	25.4	-	1.00	-

The diagram shows a side view of the DO-201AD/DO-27 package. It features a central cylindrical body with two leads extending from it. Dimension A is the length of the body, B is the diameter of the body, C is the thickness of the leads, and D is the length of the leads. The body is marked with 'YFW' and 'xxxx' (representing the model name). A shaded area on the body is labeled 'Cathode Mark'.

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