Super Fast Silicon Rectifiers

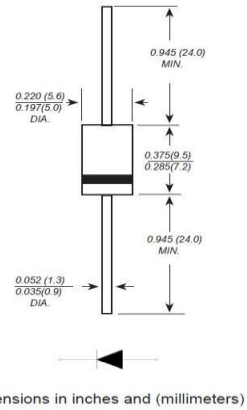
Reverse Voltage - 100 to 600 V
Forward Current - 5 A

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: 0.98 g / 0.0345oz



Dimensions in inches and (millimeters)

DO-201AD/DO-27

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	SF52	SF53	SF54	SF56	SF57	SF58	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	150	200	400	500	600	V
Maximum RMS voltage	V_{RMS}	70	105	140	280	350	420	V
Maximum DC Blocking Voltage	V_{DC}	100	150	200	400	500	600	V
Maximum Average Forward Rectified Current at T_c = 100 °C	$IF_{(AV)}$	5.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	200.0						A
Maximum Instantaneous Forward Voltage at 5.0A	V_F	0.95			1.25	1.7		V
Maximum DC Reverse Current T_a = 25 °C at Rated DC Blocking Voltage T_a=125 °C	I_R	10 500						μA
Maxinum reverse recovery time(Note 1)	Trr	35						nS
Typical Junction Capacitance(Note 2)	C_j	80.0						pF
Typical Thermal Resistance	$R_{\theta JA}$	45.0						°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						°C

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

(2) Reverse recovery time test condition: IF=0.5A IR=1.0A Irr=0.25A

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Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

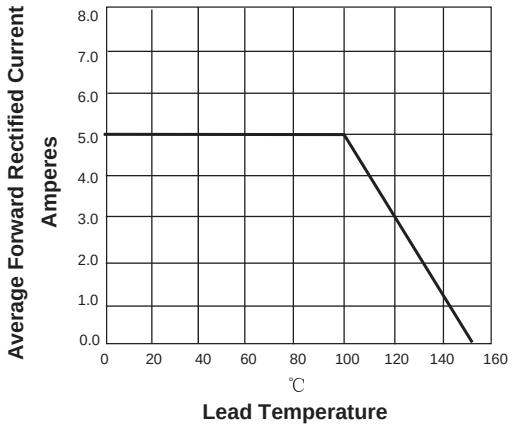


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

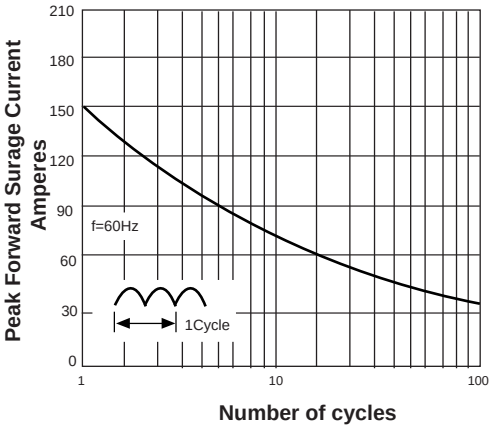


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

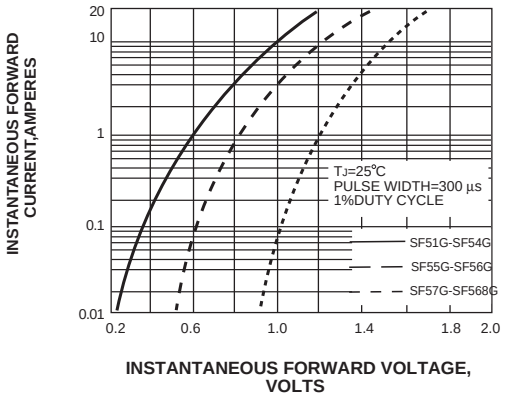
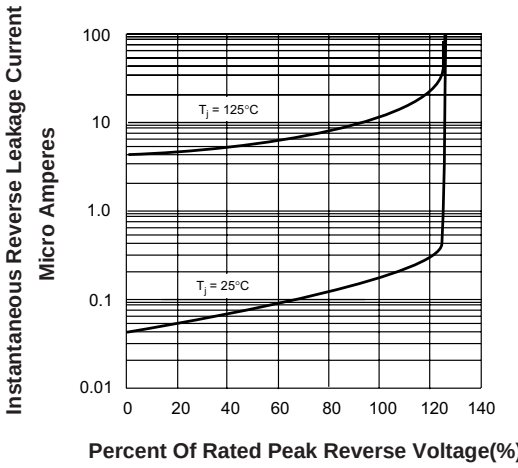
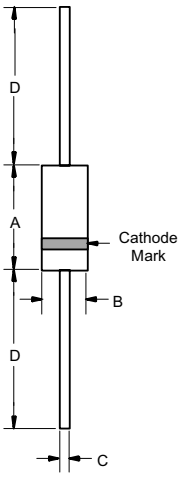


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



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Package Outline DO-201AD(DO-27)



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	---	.370	---	9.50	
B	---	.250	---	6.40	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
DO-201AD(DO-27)	BOX	250/1000/1250	EIA-481-1

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