

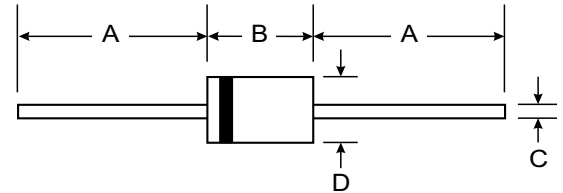
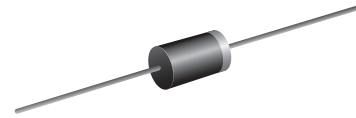
VOLTAGE RANGE: 50 - 800V
CURRENT: 5.0 A

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

RATING	SYMBOL	SF51	SF52	SF53	SF54	SF55	SF56	SF57	SF58	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	600	800	Volts
Maximum RMS Voltage	VRMS	35	70	105	140	210	280	420	560	Volts
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	600	800	Volts
Maximum Average Forward Current 0.375"(9.5mm) Lead Length $T_a = 55^\circ\text{C}$	IF(AV)	5.0								Amps.
Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	135								Amps.
Maximum Peak Forward Voltage at $I_F = 5.0\text{ A}$.	V _F	0.95			1.4		1.7			Volts
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 100^\circ\text{C}$	I _R	5								μA
	I _{R(H)}	50								μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	35								ns
Typical Junction Capacitance (Note 2)	C _J	50								pf
Junction Temperature Range	T _J	- 65 to + 150								$^\circ\text{C}$
Storage Temperature Range	T _{STG}	- 65 to + 150								$^\circ\text{C}$

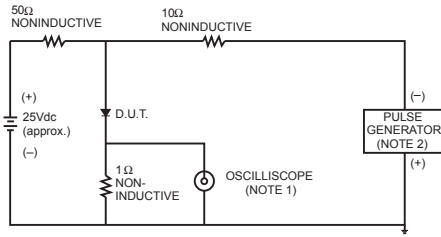
Notes :

- (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



RATING AND CHARACTERISTIC CURVES (SF51 THRU SF58)

FIG.1- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm, 22pF.
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

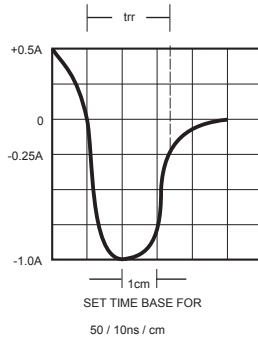


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

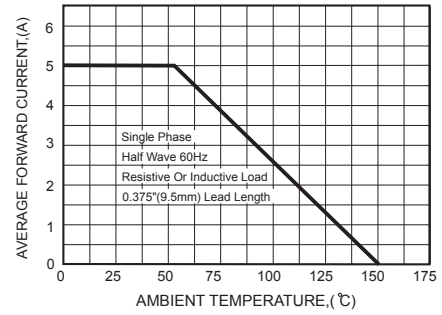


FIG.3-TYPICAL FORWARD CHARACTERISTICS

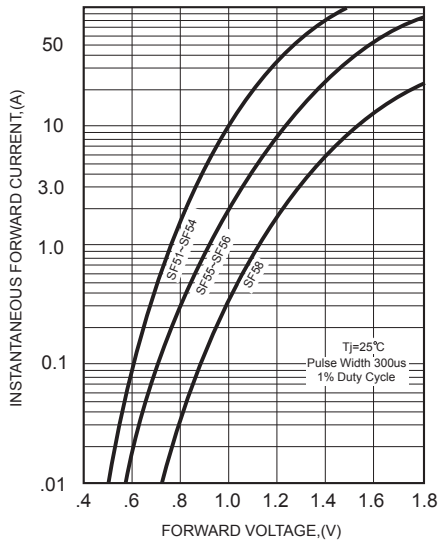


FIG.4-TYPICAL REVERSE CHARACTERISTICS

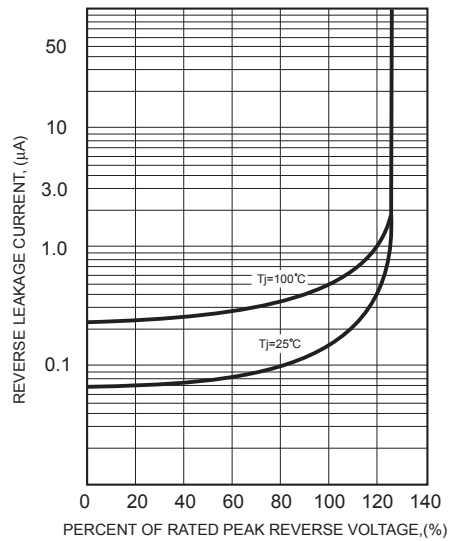


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

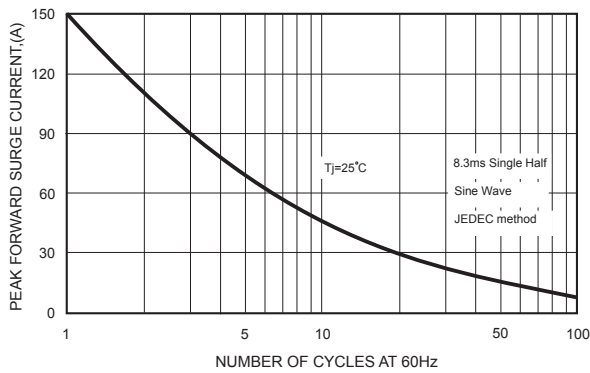


FIG.6-TYPICAL JUNCTION CAPACITANCE

