



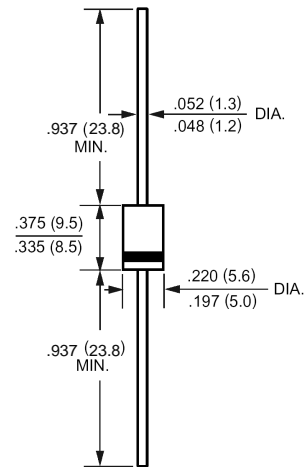
**FEATURES**

- Glass Passivated chip junction
- High surge capability
- Low forward voltage, high current capability
- Hermetically sealed
- Superfast recovery times
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage.

**MECHANICAL DATA**

Case: Molded plastic, DO-201AD  
 Epoxy: UL 94V-O rate flame retardant  
 Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed  
 Polarity: Color band denotes cathode end  
 Mounting position: Any  
 Weight: 0.04ounce, 1.1gram

**DO-201AD(DO-27)**



**Dimensions in inches and (millimeters)**

**Maximum Ratings and Electrical Characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

Parameter	Symbol	SFA06	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	400	V
Maximum RMS Voltage	$V_{RMS}$	280	V
Maximum DC blocking Voltage	$V_{DC}$	400	V
Maximum Average Forward Rectified Current at $T_C = 100^\circ C$	$I_{F(AV)}$	10.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	120	A
Maximum Reverse Recovery Time (Note 1)	$t_{rr}$	35	nS
Typical Junction Capacitance (Note 2)	$C_J$	50	pF
Operation Junction Temperature and Storage Temperature	$T_J, T_{STG}$	-55 to +175	°C

**ELECTRICAL CHARACTERISTICS** ( $T_C=25^\circ C$  unless otherwise noted)

Parameter	Symbol	Typ	Max	Units
Maximum Forward Voltage at 10.0A DC	$V_F$	1.10	1.30	V
Maximum DC Reverse Current at rated DC blocking voltage	$I_R$	----	10	$\mu A$
			100.0	

**THERMAL CHARACTERISTICS** ( $T_C=25^\circ C$  unless otherwise noted)

Parameter	Symbol	SFA06	Units
Typical Thermal Resistance (Note 3)	$R_{(JC)}$	6.5	°C/W

**Note:**

1. Test Conditions:  $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance From Junction to Case



Characteristic Curves ( $T_A=25\text{ }^\circ\text{C}$  unless otherwise noted)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

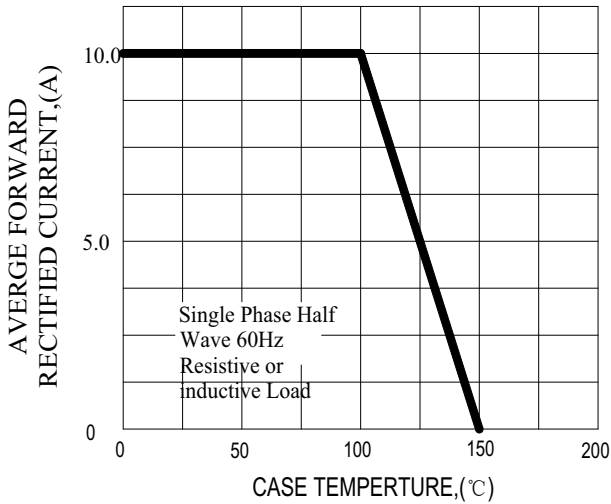


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

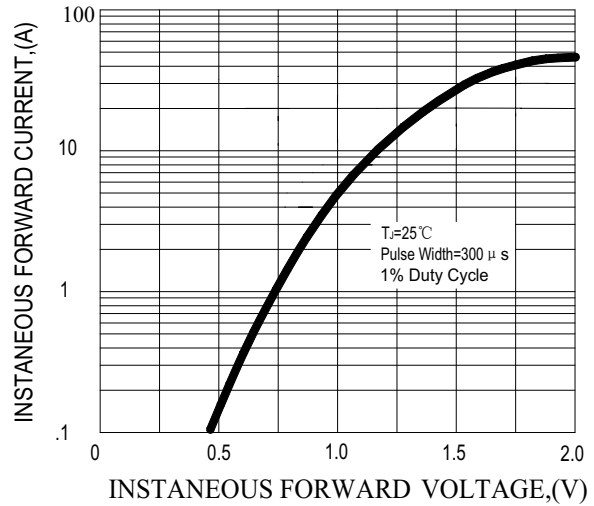


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

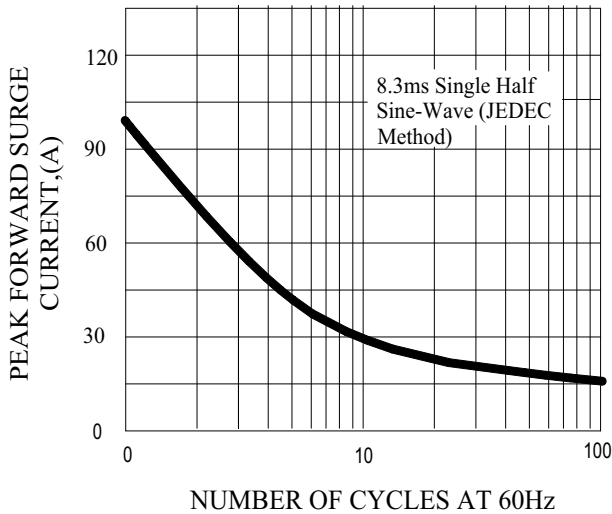


FIG.4-TYPICAL REVERSE CHARACTERISTICS

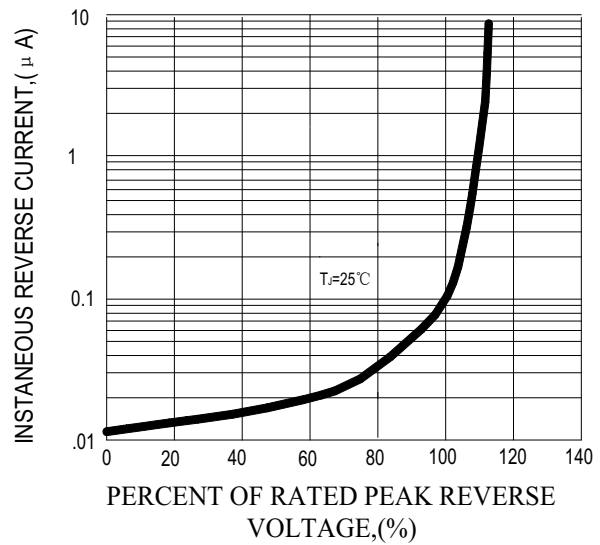


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

