SFA08G

Superfast Recovery Rectitiers

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

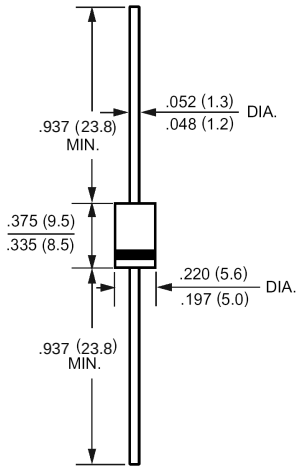
Lead: Axial leads, solderable per MIL-STD-750, method 2026

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℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60H_Z, resistive or inductive load.
For capacitive load, derate current by 20%.

Type Number	SYMBOL	SFA08G	Unit
Maximum Recurrent 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 0.375"(9.5mm) lead length at T_A=55℃	$I_{F(AV)}$	10.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150	A
Maximum instantaneous forward voltage at 5.0A	V_{FM}	1.7	V
Peak Reverse Current @T_A=25℃	I_R	10	uA
At Rated DC Blocking Voltage @T_A125 ℃		100	
Maximum reverse recovery time (NOTE 1)	T_{RR}	35	ns
Typical Junction Capacitance (Note 2)	C_J	50	pF
Typical Thermal Resistance Junction to Ambient(Note 3)	$R_{\theta JA}$	20	℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to + 150	℃

NOTES:

1- Reverse Recovery Test Conditions：I_F=.5A，I_R=1A，I_{RR}=.25A.

2- Measured at 1 MH_Z and applied reverse voltage of 4.0 VDC.

3- Thermal Resistance Junction to Ambient and form junction to lead at 0.375"(9.5mm) lead length P.C.B. Mounted.

Characteristic Curves (T_A=25 ℃ unless otherwise noted)

FIG. 1- FORWARD CURRENT DERATING CURVE

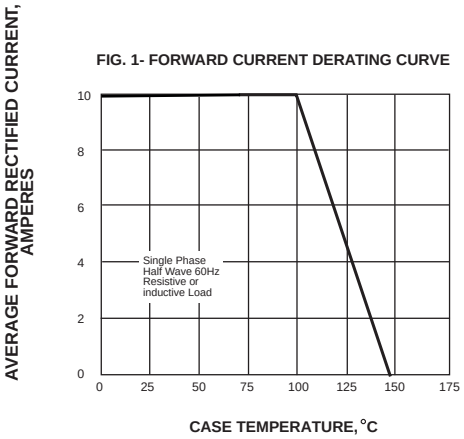


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

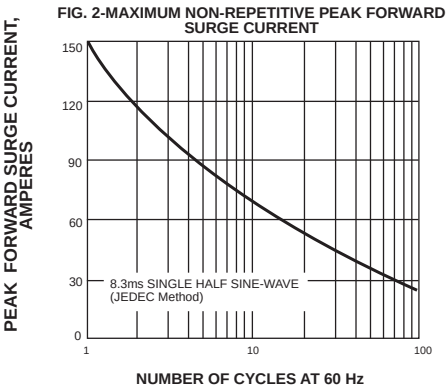


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

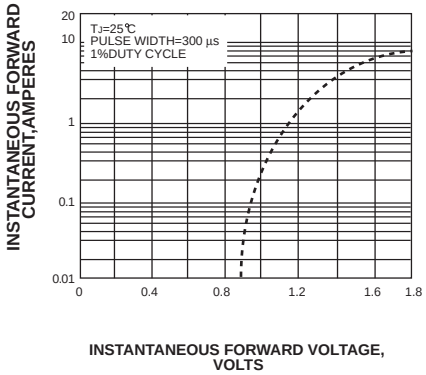


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

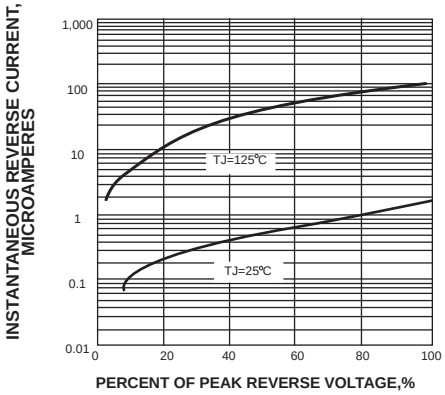


FIG. 5-TYPICAL JUNCTION CAPACITANCE

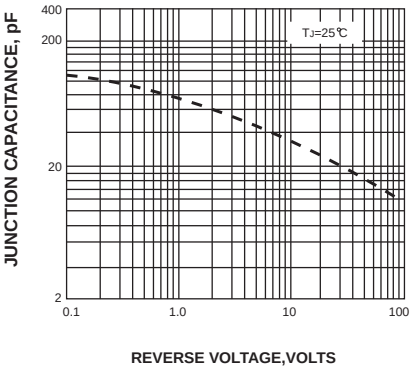


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

