SF61G THRU SF68G

Superfast Recovery Rectitiers

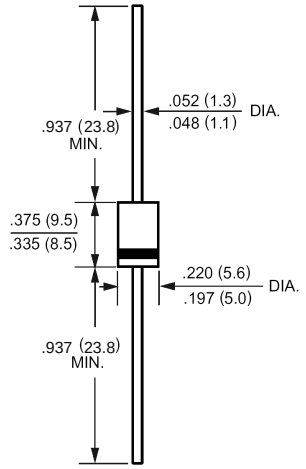
FEATURES

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

	Symbols	*SF61G*	*SF62G*	*SF63G*	*SF64G*	*SF65G*	*SF66G*	*SF68G*	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	**Volts**
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	**Volts**
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	**Volts**
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at T_A=55℃	$I_{(AV)}$	6.0							**Amp**
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	175							**Amp**
Maximum Forward Voltage at 6.0A DC and 25℃	V_F	1.0				1.25		1.65	**Volts**
Maximum Reverse Current at T_A=25℃	I_R	5.0							**uAmp**
at Rated DC Blocking Voltage T_A=100℃		500							
Typical Junction Capacitance (Note 1)	C_J	45							**pF**
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	25							**℃/W**
Maximum Reverse Recovery Time (Note 3)	T_{RR}	35							**nS**
Operating Junction Temperature Range	T_J	-55 to +150							**℃**
Storage Temperature Range	Tstg	-55 to +150							**℃**

NOTES:

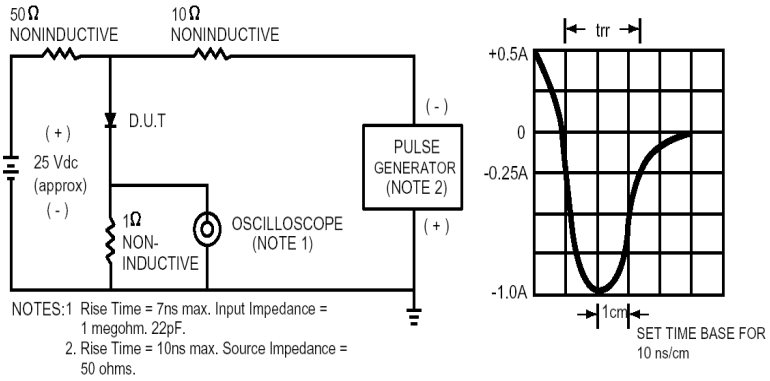
1- Measured at 1 MH_Z and applied reverse voltage of 4.0 VDC.

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

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

RATINGS AND CHARACTERISTIC CURVES

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

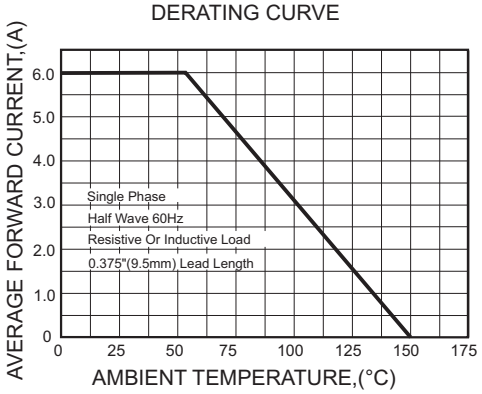


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

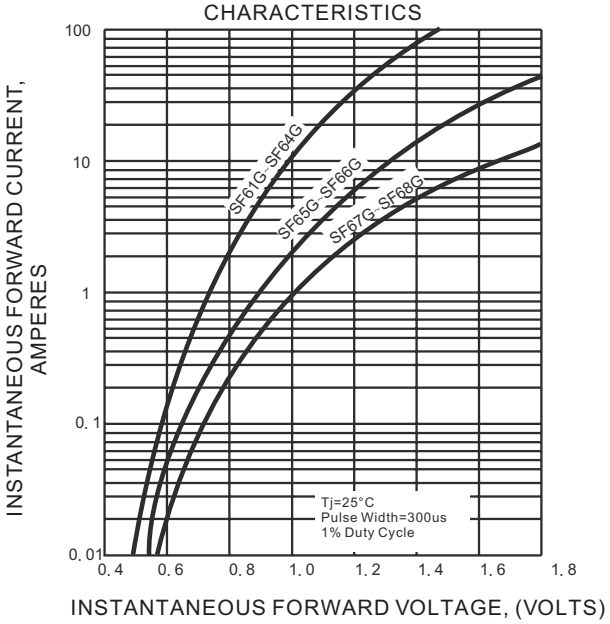


FIG.4-TYPICAL REVERSE CHARACTERISTICS

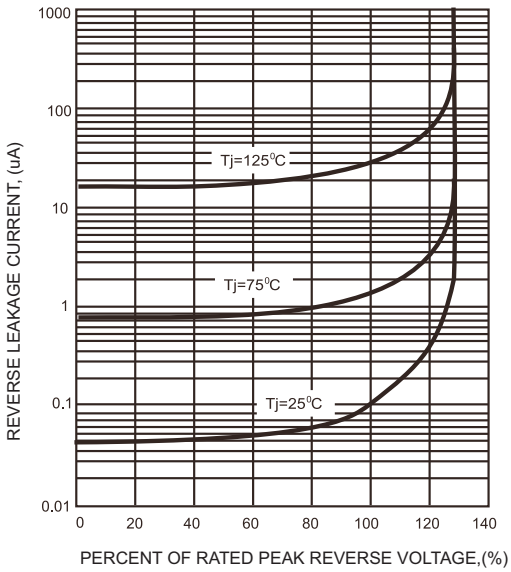


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

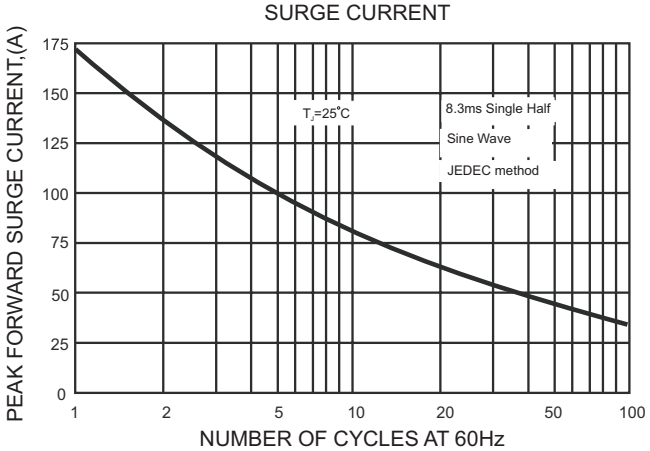


FIG.6-TYPICAL JUNCTION CAPACITANCE

