佑风电子
YFSEMI ELECTRON

SF31G THRU SF38G

Superfast Recovery Rectitiers

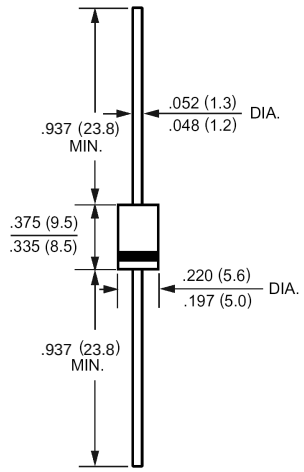
FEATURES

· 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	*SF31G*	*SF32G*	*SF33G*	*SF34G*	*SF35G*	*SF36G*	*SF38G*	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	650	**Volts**
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	450	**Volts**
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	650	**Volts**
Maximum Average Forward Rectified Current 375"(9.5mm) Lead Length at T_A=55℃	$I_{(AV)}$	3.0							**Amp**
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	125							**Amp**
Maximum Forward Voltage at 3.0A DC and 25℃	V_F	0.95				1.25		1.7	**Volts**
Maximum Reverse Current at T_A=25℃ at Rated DC Blocking Voltage T_A=100℃	I_R	5.0 500							**uAmp**
Typical Junction Capacitance (Note 1)	C_J	100				80			**pF**
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	20							**℃/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 from Junction to Ambient 0.375"(9.5mm) lead length P.C.B. Mounted.
3- Reverse Recovery Test Conditions：I_F=.5A，I_R=1A，I_{RR}=.25A.

佑风电子
YFSEMI ELECTRON

SF31G THRU SF38G

Superfast Recovery Rectitiers

RATINGS AND CHARACTERISTIC CURVES

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

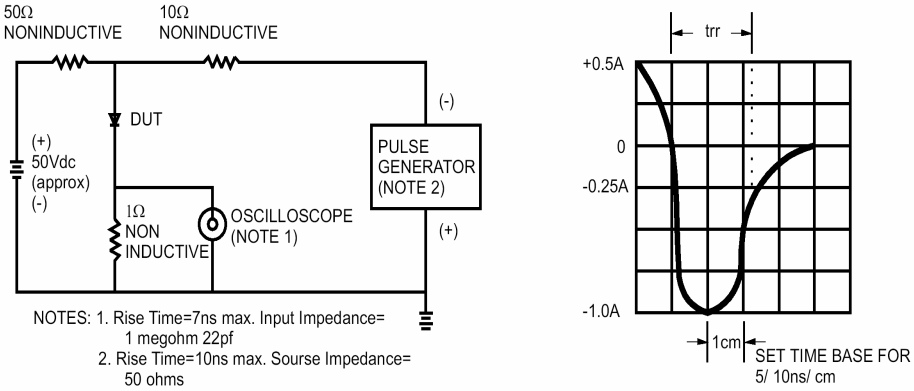


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

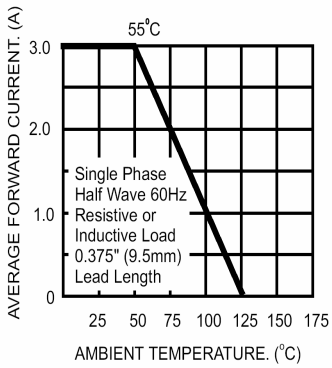


FIG.3- TYPICAL REVERSE CHARACTERISTICS

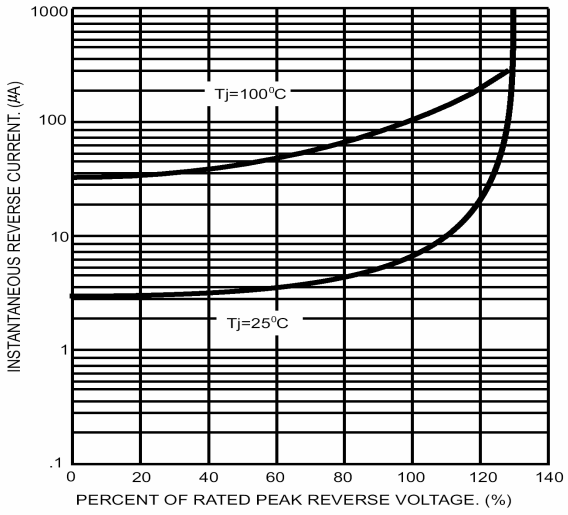


FIG.4- TYPICAL FORWARD CHARACTERISTICS

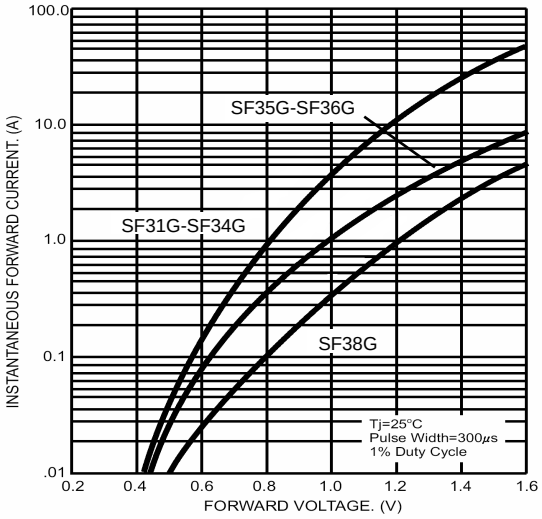


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

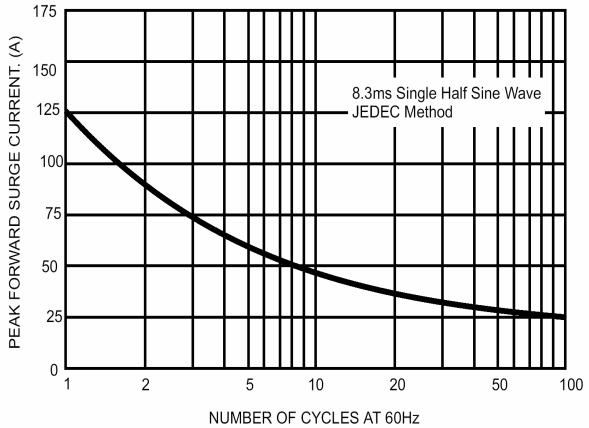


FIG.6- TYPICAL JUNCTION CAPACITANCE