



SF11G THRU SF18G

1.0 AMP. Glass Super Fast Rectifiers

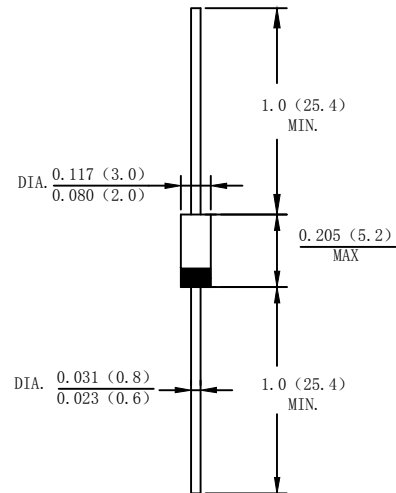
Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: Molded plastic DO-41
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Making: Type Number
- Lead Free: For RoHS/Lead Free Version

DO-41



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	SF11G	SF12G	SF13G	SF14G	SF15G	SF16G	SF18G	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V
Average Rectified Output Current (Note 1) @ $T_L = 90^\circ C$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35							A
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	5.084							A^2s
Forward Voltage @ $I_F=1.0A$	V_{FM}	0.95			1.3		1.7		V
Peak Reverse Current @ $T_A=25^\circ C$	I_R	5.0							μA
At Rated DC Blocking Voltage @ $T_A=125^\circ C$		100							
Maximum Reverse Recovery Time (Note 2)	T_{RR}	35							nS
Typical Junction Capacitance (Note 3)	C_J	10							pF
Typical Thermal Resistance Junction to Ambient (Note 4)	$R_{\theta JA}$	75							$^\circ C/W$
Operating Temperature Range	T_J	-55 to + 150							$^\circ C$
Storage Temperature Range	T_{STG}	-55 to + 150							$^\circ C$

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.

3. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

4. Thermal Resistance from Junction to Ambient at 0.375(9.5mm) lead length.



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FIG. 1 – FORWARD CURRENT DERATING CURVE

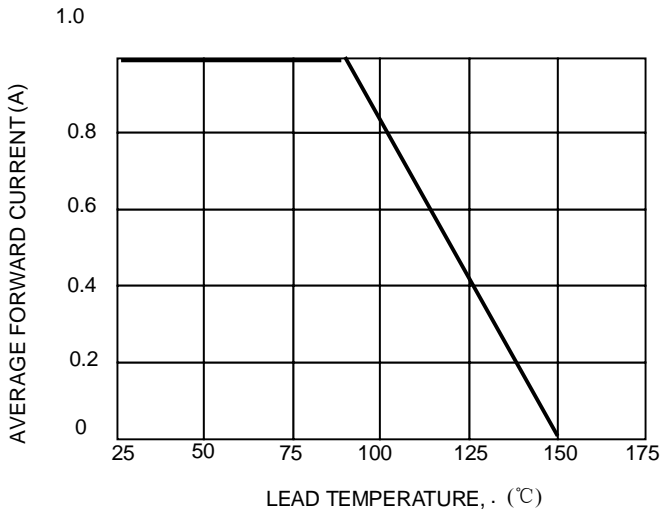


FIG.2-TYPICAL FORWARD CHARACTERISTICS

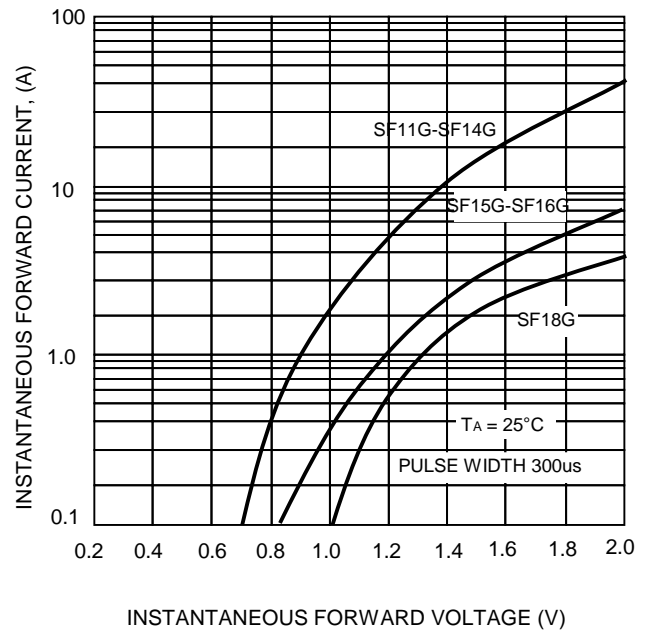


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

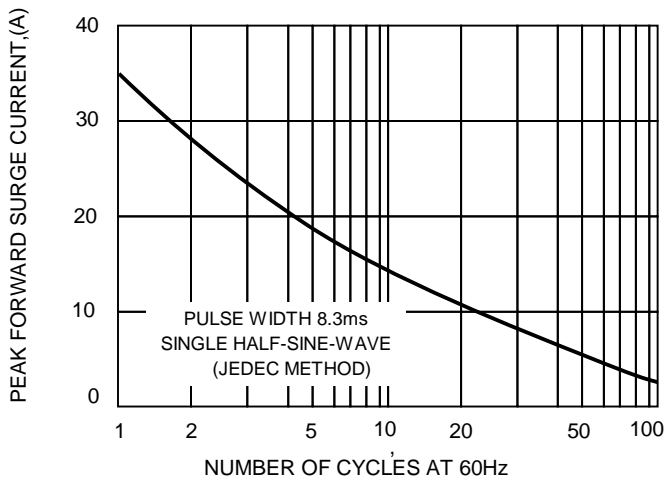
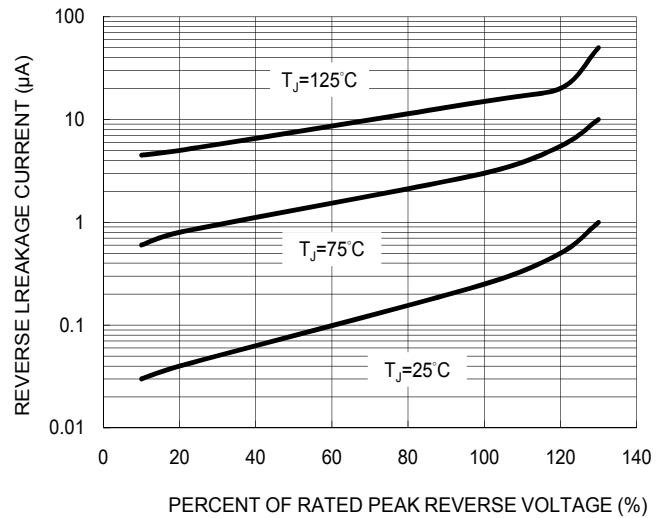


FIG. 4 TYPICAL REVERSE CHARACTERISTICS





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