



# SF21G THRU SF28G

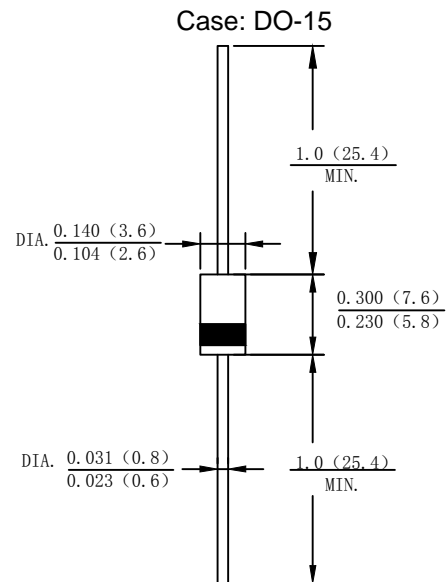
2.0 AMP. Glass Passivated Super Fast Rectifiers

## Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

## Mechanical Data

- Case: Molded plastic DO-15
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS/Lead Free Version



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	SF21G	SF22G	SF23G	SF24G	SF25G	SF26G	SF28G	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RM}$	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) @ $T_L=100^\circ\text{C}$	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50							A
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	10.375							$\text{A}^2\text{s}$
Forward Voltage @ $I_F=2.0\text{A}$	$V_{FM}$	0.95			1.3		1.7		V
Peak Reverse Current @ $T_A=25^\circ\text{C}$	$I_R$	5.0							uA
At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$		100							
Maximum Reverse Recovery Time (Note 2)	$T_{RR}$	35							nS
Typical Junction Capacitance (Note 3)	$C_j$	25							pF
Typical Thermal Resistance Junction to Ambient (Note 4)	$R_{\theta JA}$	25							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_j$	-55 to + 150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to + 150							$^\circ\text{C}$

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

2. Reverse Recovery Test Conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{RR}=0.25\text{A}$

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

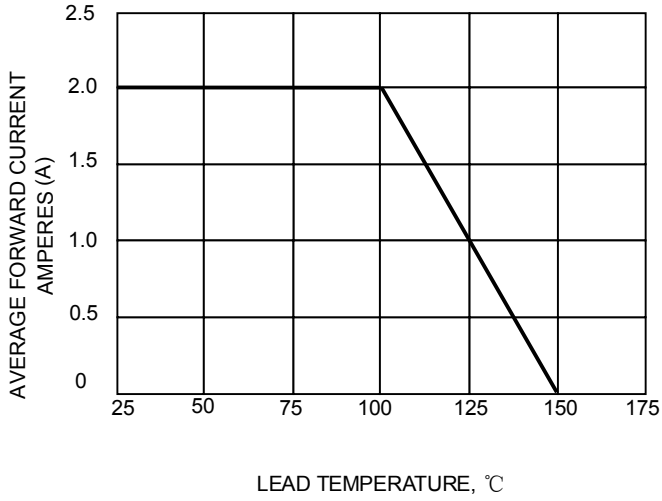


FIG.2-TYPICAL FORWARD CHARACTERISTICS

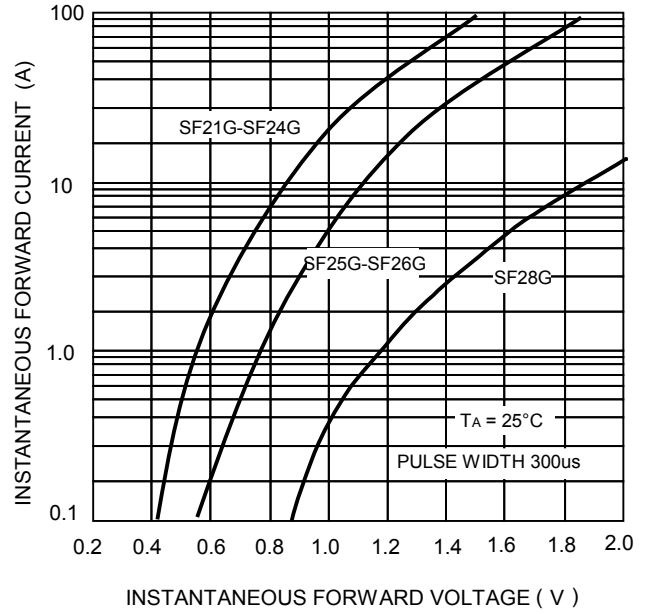


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

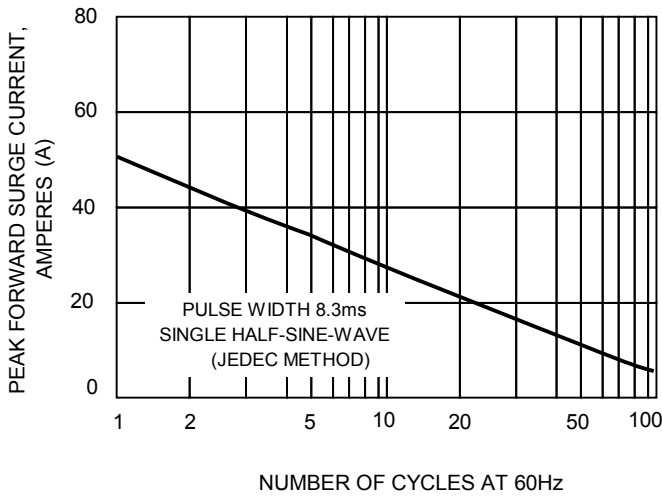
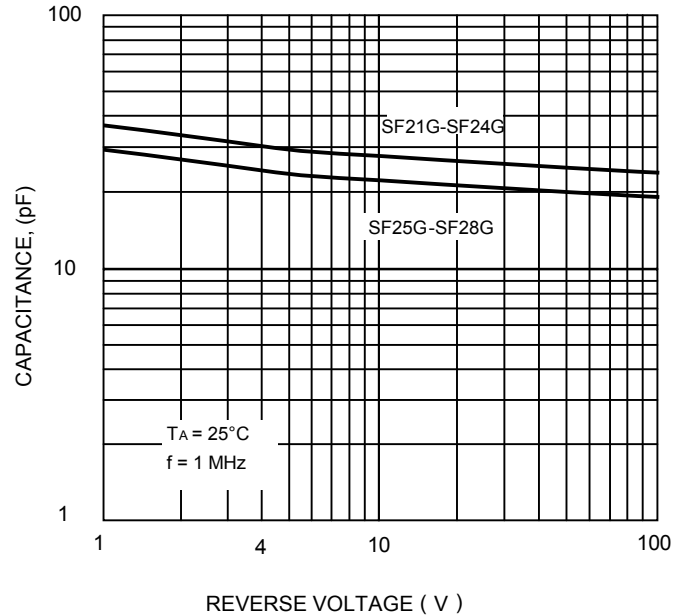


FIG.4 – TYPICAL JUNCTION CAPACITANCE





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