



# SF21GU THRU SF28GU

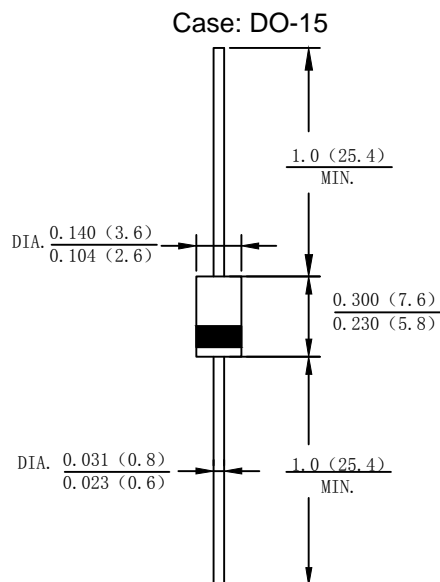
2.0 AMP. Glass Passivated Super Fast Rectifiers

## 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



## 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	SF 21GU	SF 22GU	SF 23GU	SF 24GU	SF 25GU	SF 26GU	SF 28GU	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RM</sub>	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	150	200	300	400	600	V
Average Rectified Output Current (Note 1) @T <sub>L</sub> =100 °C	I <sub>F(AV)</sub>	2.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	60							A
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	14.94							A <sup>2</sup> s
Forward Voltage @IF=2.0A	V <sub>FM</sub>	0.95				1.3		1.7	V
Peak Reverse Current @T <sub>A</sub> =25°C	I <sub>R</sub>	5.0							uA
At Rated DC Blocking Voltage @T <sub>A</sub> =125°C		100							
Maximum Reverse Recovery Time (Note2 )	T <sub>RR</sub>	35							nS
Typical Junction Capacitance (Note 3)	C <sub>j</sub>	20						10	pF
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	65							°C/W
Operating Temperature Range	T <sub>j</sub>	-55 to + 150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150							°C

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

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

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



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Fig. 1 Forward Current Derating Curve

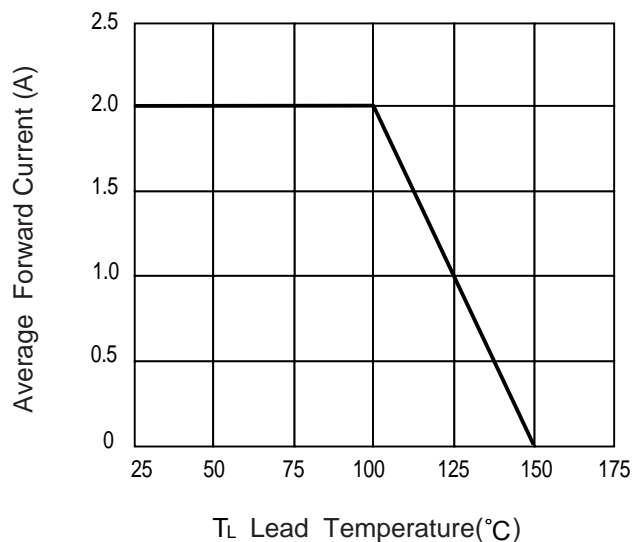


Fig. 2 Typ. Forward Characteristics

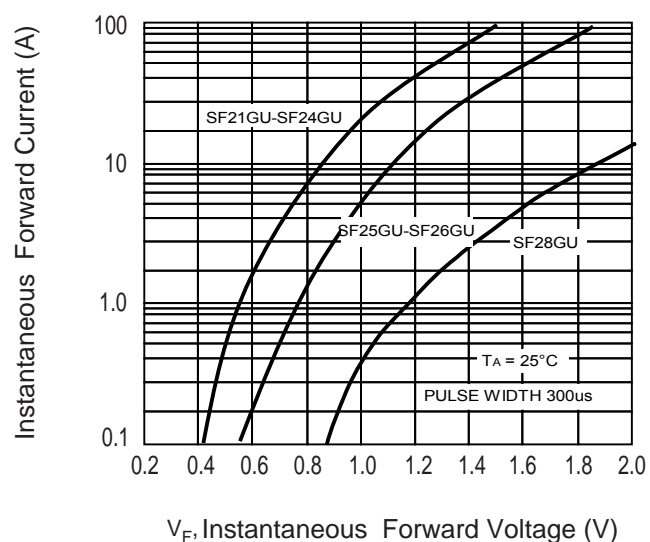


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

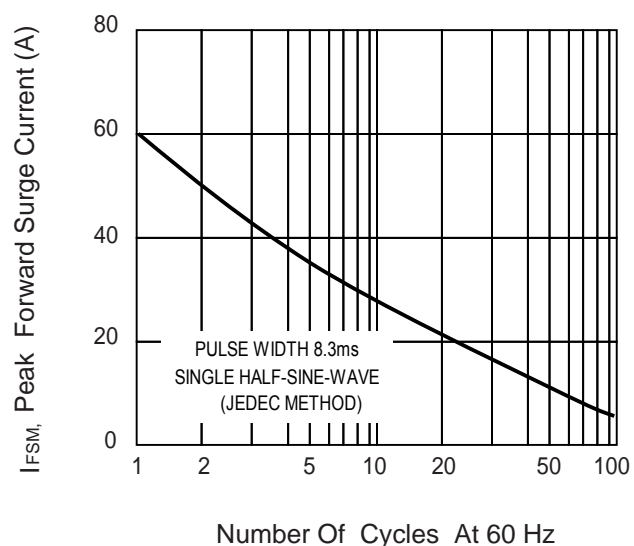
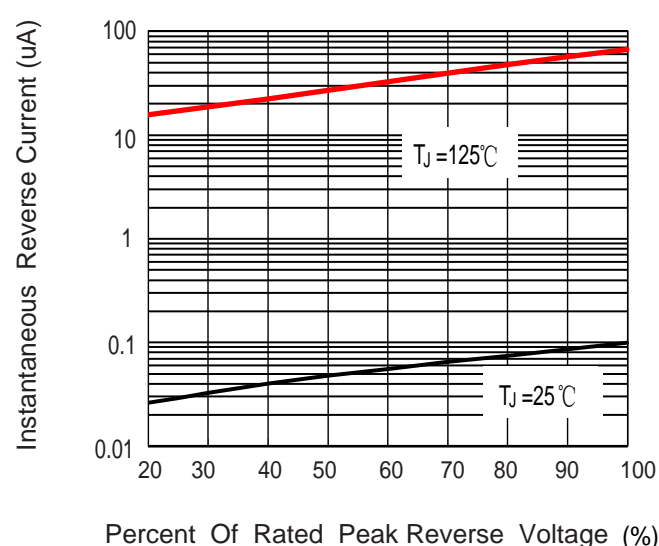


Fig. 4 Typical Reverse Characteristics (per element)





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