

SF21G THRU SF28G

Ultra Fast Glass Passivated Rectifier

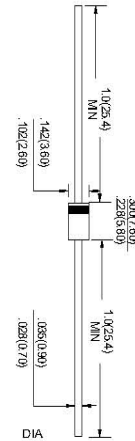
Reverse Voltage – 50 to 600 V

Forward Current – 2 A

Features

- High surge current capability

DO-15



Dimensions in inches and millimeters

Absolute Maximum Ratings and Characteristics

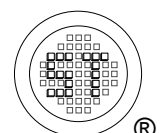
Rating at 25 °C ambient temperature unless otherwise specified. Single-phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	SF21G	SF22G	SF23G	SF24G	SF25G	SF26G	SF27G	SF28G	Units
Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	500	600	V
RMS Voltage	V_{RMS}	35	70	105	140	210	280	350	420	V
DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	500	600	V
Average Forward Rectified Current 0.375" (9.5 mm) Lead Length at $T_A = 75\text{ }^{\circ}\text{C}$	$I_{(AV)}$	2								A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50								A
Instantaneous Forward Voltage at 2 A	V_F	0.95				1.3		1.7		V
DC Reverse Current $T_A = 25\text{ }^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_A = 125\text{ }^{\circ}\text{C}$	I_R	5 150								μA
Reverse Recovery Time ¹⁾	T_{rr}	35								nS
Typical Junction Capacitance ²⁾	C_J	50				30				pF
Typical Thermal Resistance ³⁾	$R_{\theta JA}$	50								$^{\circ}\text{C} / \text{W}$
Operating Junction Temperature Range	T_j	- 55 to + 150								$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150								$^{\circ}\text{C}$

¹⁾ Reverse recovery test conditions: $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{RR} = 0.25\text{ A}$.

²⁾ Measured at 1 MHz and applied reverse voltage of 4 V.

³⁾ Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length P. C. B. Mounted.



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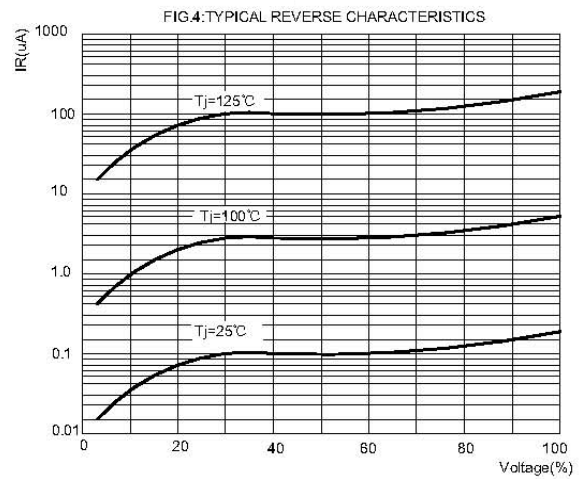
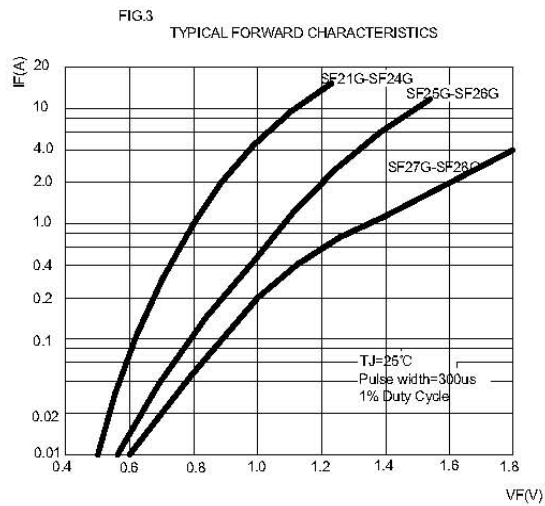
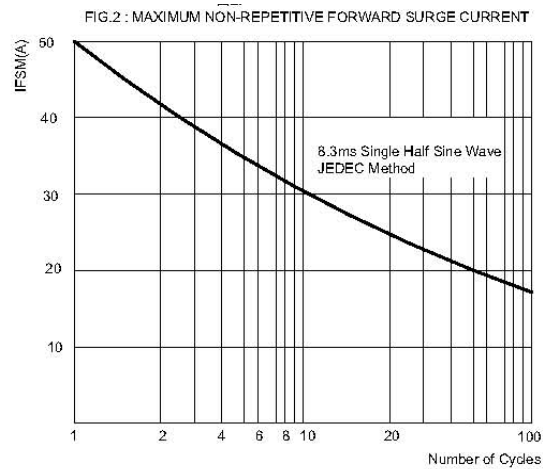
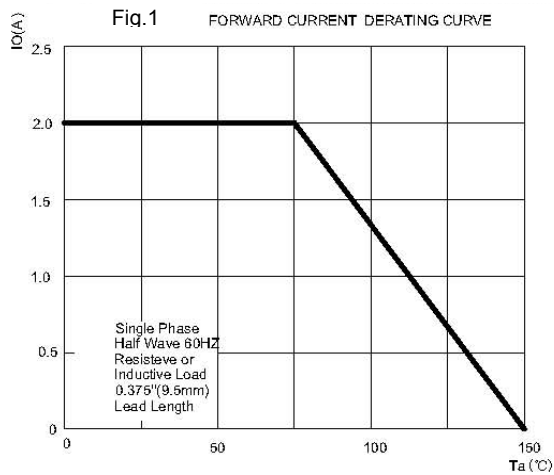


FIG5

Diagram of circuit and Testing wave form of reverse recovery time

