

Super Fast Glass Passivated Rectifiers
Reverse Voltage - 600 Volts
Forward Current - 2.0 Amperes
Features

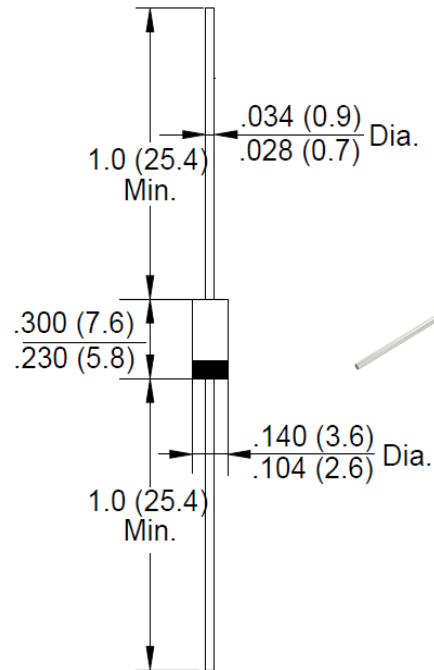
- Fast switching for high efficiency
- Low cost
- Low reverse leakage current
- High current capability
- Low forward voltage drop
- Meet UL flammability classification 94V-0
- AEC-Q101 qualified

Mechanical Data

- Case: JEDEC DO-15 Molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

Applications

- For use in SMPS, high frequency inverters, PWM and polarity protection applications

DO-15

RoHS
 COMPLIANT

Package Outline Dimensions in Inches (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%.

Characteristics	Symbol	SF28G	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current @ $T_A=55^\circ\text{C}$	$I_{(AV)}$	2.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50	A
Peak Forward Voltage at 2.0A DC (Note1)	V_F	1.7	V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$	I_R	5.0	μA
at Rated DC Blocking Voltage @ $T_J=100^\circ\text{C}$		100	
Maximum Reverse Recovery Time (Note 2)	T_{rr}	35	nS
Typical Junction Capacitance (Note3)	C_J	30	pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	25	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

Notes: 1. 300uS pulse width, 2%duty cycle.

 2. Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $IRR=0.25\text{A}$.

3. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

4. The typical data above is for reference only

 SF28G-A-00-A001
 Rev. 10, 1-Nov-2019

Fig. 1 - Forward Current Derating Curve

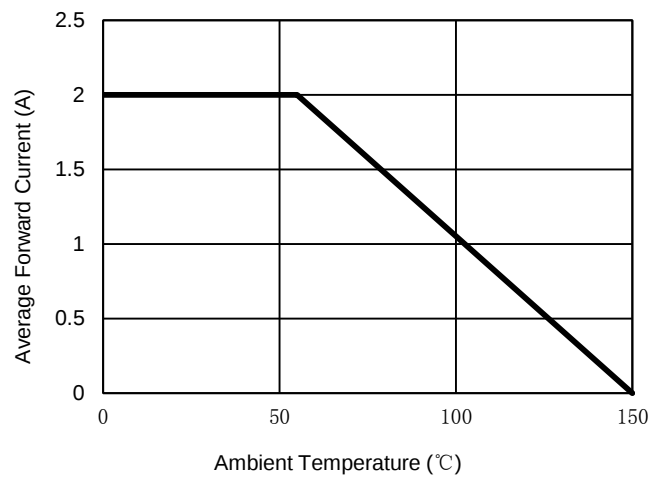


Fig. 2 - Maximum Non-Repetitive Surge Current

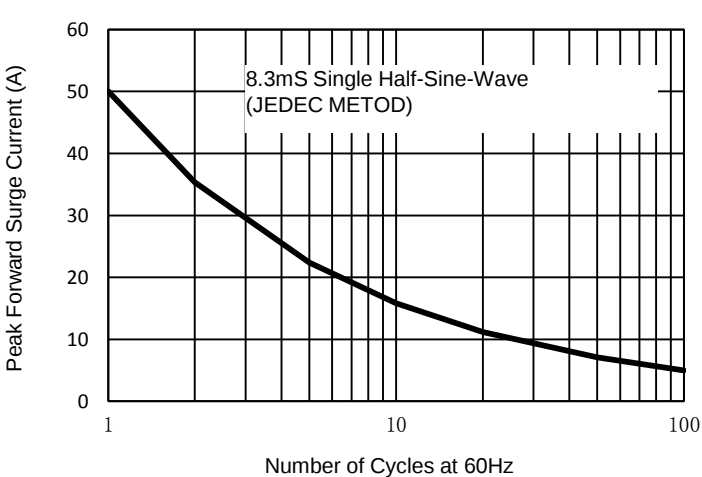


Fig. 3 - Typical Junction Capacitance

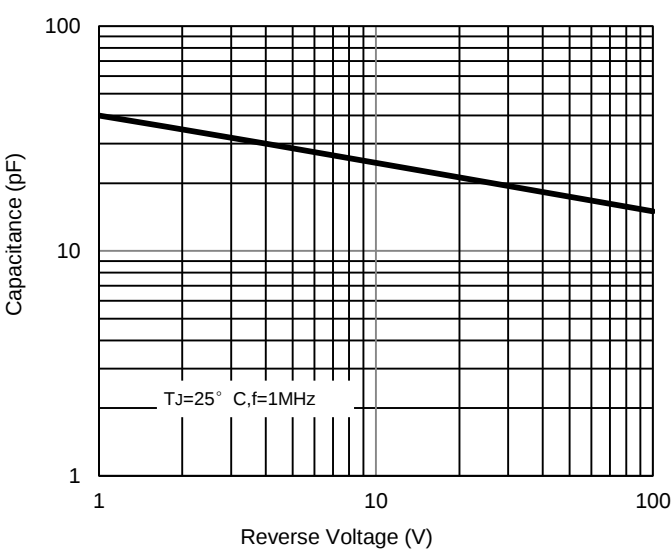
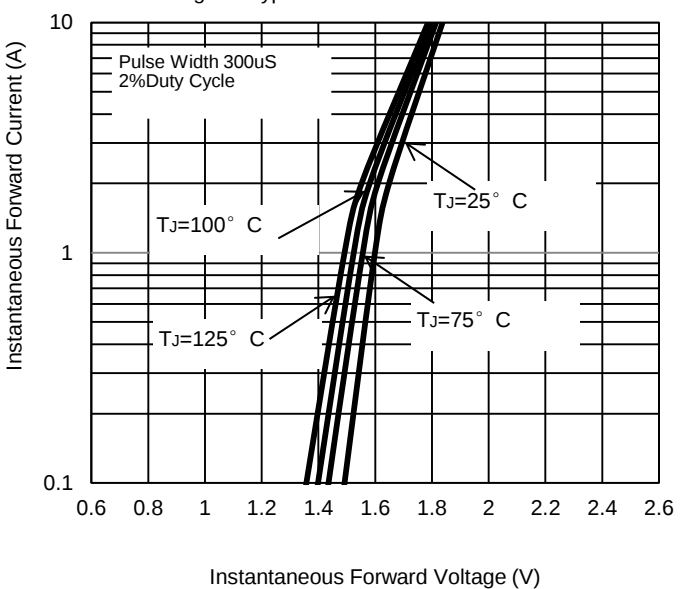


Fig. 6 - Typical Forward Characteristics



The curve above is for reference only.

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