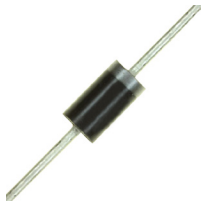


# Glass Passivated Rectifier Diodes

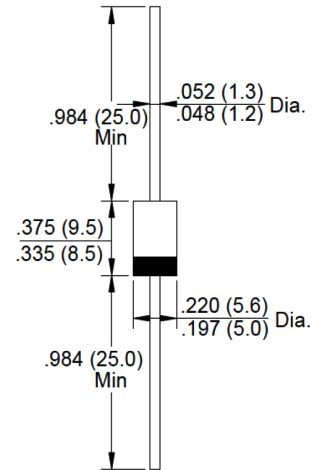
## V<sub>RRM</sub> - 600 Volts & 1000 Volts, 3A

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**RoHS  
Compliant**

DO-201AA (DO-27)



Dimensions : Inches (Millimetres)

### Features

- Low cost
- Fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Meet UL flammability classification 94V-0
- Lead free
- Case style: DO-201AA (DO-27) molded plastic

### 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	FR305G	FR307G	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	600	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	420	700	
Maximum DC Blocking Voltage	V <sub>DC</sub>	600	1000	
Maximum Average Forward Rectified Current @ T <sub>A</sub> = 55°C	I <sub>(AV)</sub>	3		A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	125		A
Peak Forward Voltage at 3A DC (Note1)	V <sub>F</sub>	1.3		V
Max. DC Reverse Current @ T <sub>J</sub> =25°C	I <sub>R</sub>	5		µA
Rated DC Blocking Voltage @ T <sub>J</sub> =100°C		100		
Maximum Reverse Recovery Time (Note 2)	T <sub>RR</sub>	250	500	nS
Typical Junction Capacitance (Note 3)	C <sub>J</sub>	40		pF
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	15		°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150		°C
Storage Temperature Range	T <sub>STG</sub>			

#### Notes:

1. 300µS pulse width, 2%duty cycle
2. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1A, I<sub>RR</sub> = 0.25A
3. Measured at 1.0 MHz and applied reverse voltage of 4V DC
4. The typical data above is for reference only

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# Glass Passivated Rectifier Diodes

## V<sub>RRM</sub> - 600 Volts & 1000 Volts, 3A

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### Rating and Characteristic Curves

Fig. 1 - Forward Current Derating Curve

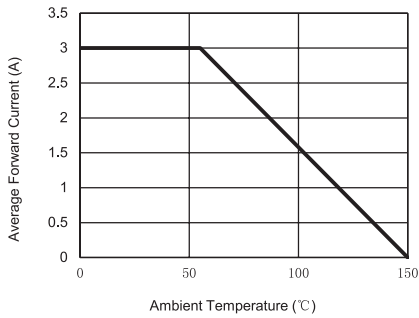


Fig. 2 - Maximum Non-Repetitive Surge Current

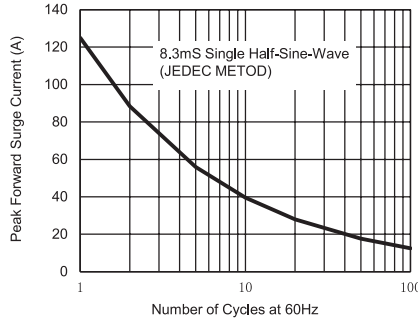


Fig. 3 - Typical Reverse Characteristics

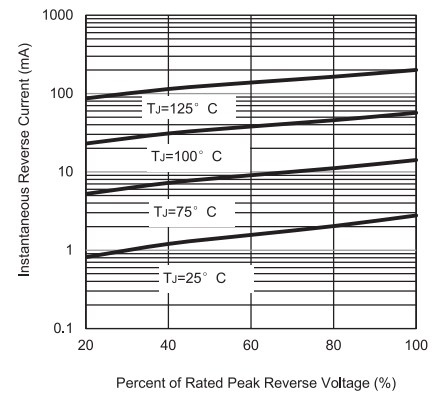


Fig. 4 - Typical Forward Characteristics

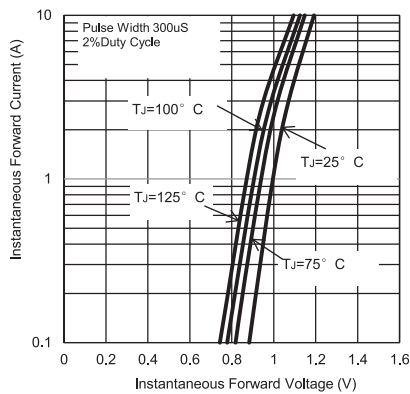
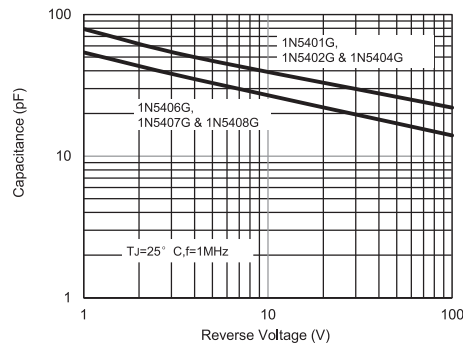


Fig. 5 - Typical Junction Capacitance



### Part Number Table

Description	Part Number
Rectifier Diode, 600V, 3A, DO-201AA (DO-27)	FR305G
Rectifier Diode, 1kV, 3A, DO-201AA (DO-27)	FR307G

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