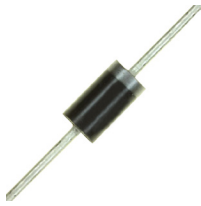


Glass Passivated Rectifier Diodes

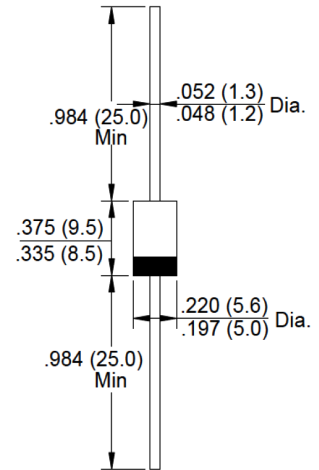
V_{RRM} - 600 Volts & 1000 Volts, 3A

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

Notes:

1. 300µS pulse width, 2%duty cycle
2. Measured with I_F = 0.5A, I_R = 1A, I_{RR} = 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_{RRM} - 600 Volts & 1000 Volts, 3A

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Rating and Characteristic Curves

Fig. 1 - Forward Current Derating Curve

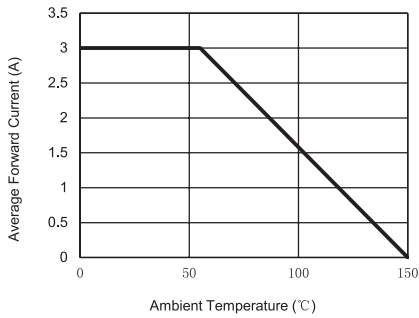


Fig. 2 - Maximum Non-Repetitive Surge Current

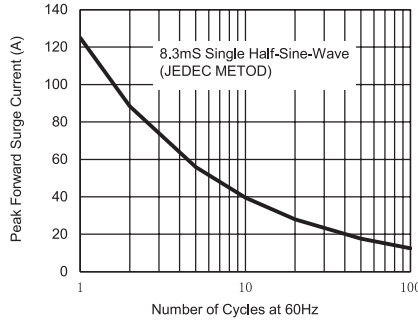


Fig. 3 - Typical Reverse Characteristics

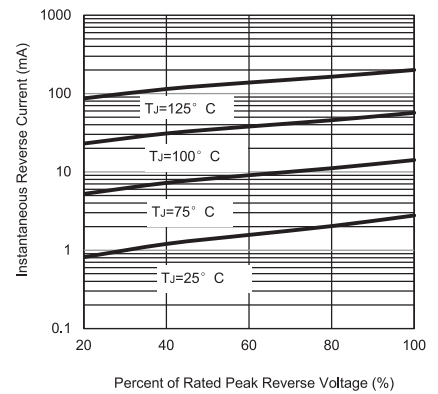


Fig. 4 - Typical Forward Characteristics

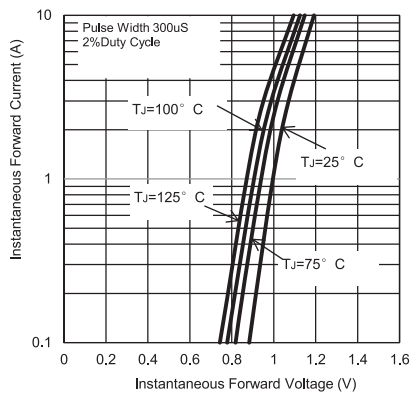
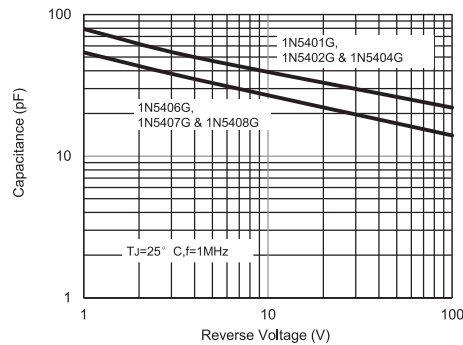


Fig. 5 - Typical Junction Capacitance



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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