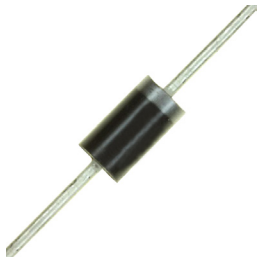


Glass Passivated Rectifier Diodes

V_{RRM} - 100 Volts & 1000 Volts, 1A

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**RoHS
Compliant**



Features

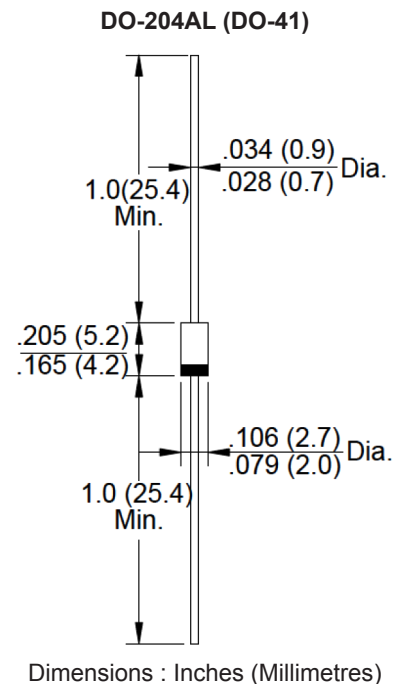
- Low cost
- Fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Meet UL flammability classification 94V-0
- Lead free
- Case style: DO-204AL (DO-41) molded plastic

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	FR102G	FR107G	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	1000	V
Maximum RMS Voltage	V_{RMS}	70	700	
Maximum DC Blocking Voltage	V_{DC}	100	1000	
Maximum Average Forward Rectified Current @ $T_A = 75^{\circ}\text{C}$	$I_{(AV)}$	1		A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30		A
Peak Forward Voltage at 1A DC (Note 1)	V_F	1.3		V
Maximum DC Reverse Current @ $T_J = 25^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_J = 100^{\circ}\text{C}$	I_R	5 100		μA
Maximum Reverse Recovery Time (Note 2)	T_{RR}	150	500	nS
Typical Junction Capacitance (Note 3)	C_J	25	15	pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	25		$^{\circ}\text{C/W}$
Operating Temperature Range	T_J	-55 to +150		$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}			

Notes:

1. 300 μS pulse width, 2%duty cycle
2. Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{RR} = 0.25\text{A}$
3. Measured at 1MHz 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} - 100 Volts & 1000 Volts, 1A

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Rating and Characteristic Curves

Fig. 1 - Forward Current Derating Curve

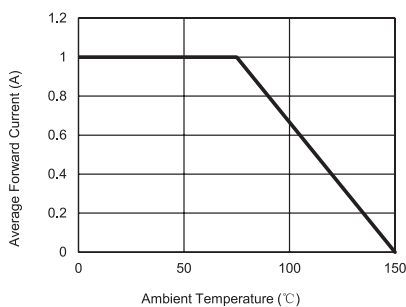


Fig. 2 - Maximum Non-Repetitive Surge Current

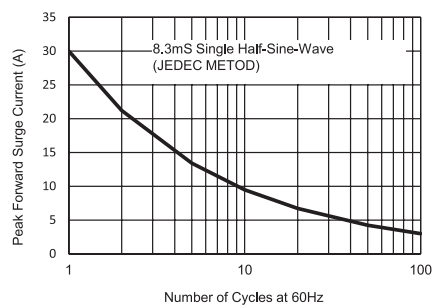


Fig. 3 - Typical Junction Capacitance

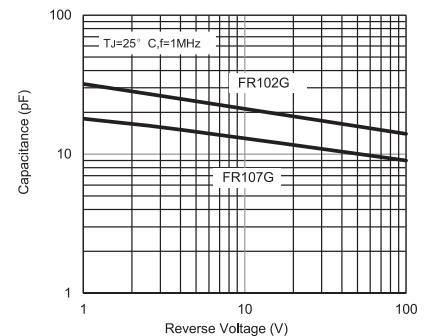
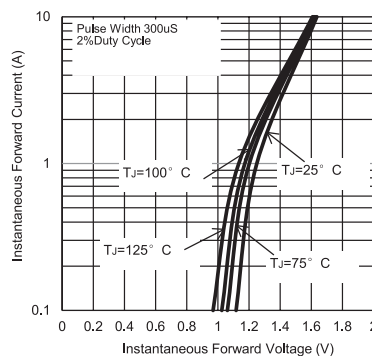


Fig. 4 - Typical Forward Characteristics



Part Number Table

Description	Part Number
Rectifier Diode, 100V, 1A, DO-204AL (DO-41)	FR102G
Rectifier Diode, 1kV, 1A, DO-204AL (DO-41)	FR107G

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