

FR301G THRU FR307G

Glass Passivated Fast Recovery Rectifiers

Reverse Voltage - 50 to 1000 V

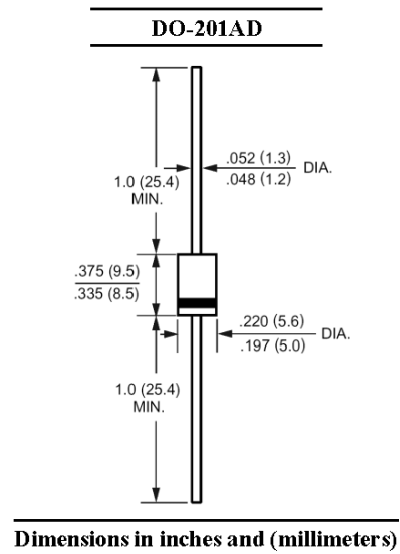
Forward Current - 3 A

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

Mechanical Data

- Case: Molded plastic, DO-201AD
- Terminals: Axial leads, solderable per MIL- STD
-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any



Maximum Ratings and Characteristics

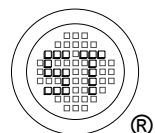
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

Maximum lead, denote by 2010

Parameter	Symbols	FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G	Units
	Marking	FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G	-
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Forward Voltage at 3 A	V _F	1.3							V
Maximum Average Forward Rectified Current 0.375"(9.5 mm) Lead Length at T _A = 55°C	I _{F(AV)}	3							A
Peak Forward Surge Current 8.3 ms Single half sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	125							A
Maximum Reverse Current at Rated T _a = 25°C DC Blocking Voltage T _a = 100°C	I _R	5 100							μA
Typical Junction Capacitance ²⁾	C _J	60							pF
Maximum Reverse Recovery Time ¹⁾	t _{rr}	150				250	500		nS
Junction and Storage Temperature Range	T _j , T _{stg}	- 55 to + 150							°C

¹⁾ Reverse Recovery Test Conditions: $I_F = 0.5\text{ A}$, $I_R = 1.0\text{ A}$, $I_{RR} = 0.25\text{ A}$.

²⁾ Measured at 1MHz and Applied Reverse Voltage of 4.0 V D.C.



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