Ultra Fast Recovery High Efficiency Rectifier Diodes VRRM - 50 Volts to 1000 Volts, 3A





Features

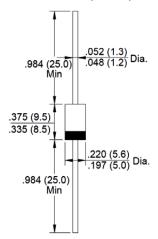
- · Glass Passivated (GPP)
- · Low cost
- · Ultra fast switching for high efficiency
- · Low reverse leakage current
- · Low forward voltage drop
- · High current capability
- · The plastic material carries UL recognition 94V-0
- · Lead free
- · Case style: DO-201AA (DO-27) molded plastic

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%.

RoHS Compliant

DO-201AA (DO-27)



Dimensions: Inches (Millimetres)

Characteristics	Symbol	MP000947	MP000948	MP000949	MP000950	MP000951	MP000952	MP000953	MP000954	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	300	400	600	800	1000	
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	600	800	1000	
Maximum Average Forward Rectified Current @ T _A = 50°C	I(AV)				;	3				А
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	Іғѕм	125						А		
Peak Forward Voltage at 2A DC	VF		1		1	.3		1.7		V
Maximum DC Reverse Current at Rated @ T _J = 25°C DC Blocking Voltage @ T _J = 100°C	lr	5 100						μA		
Maximum Reverse Recovery Time (Note 1)	Trr	50 75						nS		
Typical Junction Capacitance (Note2)	Сл	50 30						pF		

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Characteristics	Symbol	MP000947	MP000948	MP000949	MP000950	MP000951	MP000952	MP000953	MP000954	Unit
Typical Thermal Resistance Junction to Ambient	RөJA	20							°C/ W	
Operating Junction Temperature Range	TJ	-55 to +150						°C		
Storage Temperature Range	Тѕтс	-55 to +150						°C		

Notes:

- 1. Measured with $I_F = 0.5A$, $I_R = 1A$, $I_{RR} = 0.25A$
- 2. Measured at 1MHz and applied reverse voltage of 4V DC.
- 3. The typical data above is for reference only.

Rating and Characteristic Curves

Fig. 1 - Forward Current Derating Curve

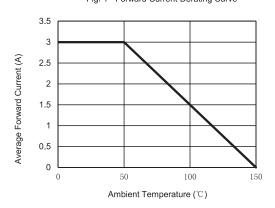
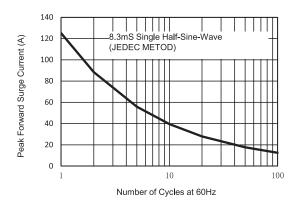


Fig. 2 - Maximum Non-Repetitive Surge Current





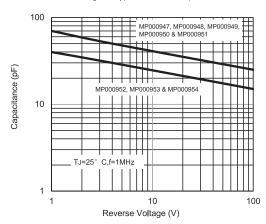
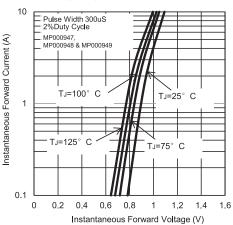


Fig. 4 - Typical Forward Characteristics

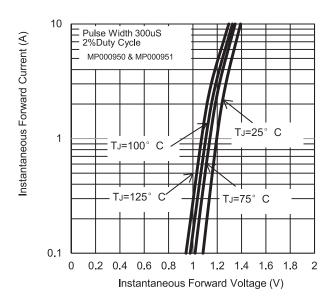


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TJ=25° C

TJ=125° C

TJ=125° C

TJ=125° C

Instantaneous Forward Voltage (V)

Fig. 6 - Typical Forward Characteristics

Part Number Table

Description	Part Number	
Rectifier Diode, Ultra Fast, 50V, 3A, DO-201AA (DO-27)	MP000947	
Rectifier Diode, Ultra Fast, 100V, 3A, DO-201AA (DO-27)	MP000948	
Rectifier Diode, Ultra Fast, 200V, 3A, DO-201AA (DO-27)	MP000949	
Rectifier Diode, Ultra Fast, 300V, 3A, DO-201AA (DO-27)	MP000950	
Rectifier Diode, Ultra Fast, 400V, 3A, DO-201AA (DO-27)	MP000951	
Rectifier Diode, Ultra Fast, 600V, 3A, DO-201AA (DO-27)	MP000952	
Rectifier Diode, Ultra Fast, 800V, 3A, DO-201AA (DO-27)	MP000953	
Rectifier Diode, Ultra Fast, 1kV, 3A, DO-201AA (DO-27)	MP000954	

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