








0.5 Amp. Surface Mounted Glass Passivated Fast Recovery Rectifier

<p>DO-219AA / M1F</p> 	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Voltage 200 V to 1000 V</td> <td style="text-align: center;">Current 0.5 A</td> </tr> <tr> <td colspan="2"> <p>FEATURES</p> <ul style="list-style-type: none"> Low profile package Ideal for automated placement Low power losses, high efficiency High surge current capability Cavity-free glass-passivated junction Low forward voltage drop Solder dip 260°C, 10s Fast switching for high efficiency Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C </td> </tr> <tr> <td colspan="2" style="text-align: right; vertical-align: middle;">   RoHS COMPLIANT </td> </tr> <tr> <td colspan="2"> <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> Case: DO-219AA / M1F. Epoxy meets UL 94V-0 flammability rating. Polarity: Color band denotes cathode end. Terminals: Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test </td> </tr> <tr> <td colspan="2"> <p>TYPICAL APPLICATIONS</p> <p>For use in fast switching rectification of power supply, inverters, converters, and freewheeling diodes for consumer, and telecommunication.</p> </td> </tr> </table>	Voltage 200 V to 1000 V	Current 0.5 A	<p>FEATURES</p> <ul style="list-style-type: none"> Low profile package Ideal for automated placement Low power losses, high efficiency High surge current capability Cavity-free glass-passivated junction Low forward voltage drop Solder dip 260°C, 10s Fast switching for high efficiency Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C 		  RoHS COMPLIANT		<p>MECHANICAL DATA</p> <ul style="list-style-type: none"> Case: DO-219AA / M1F. Epoxy meets UL 94V-0 flammability rating. Polarity: Color band denotes cathode end. Terminals: Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test 		<p>TYPICAL APPLICATIONS</p> <p>For use in fast switching rectification of power supply, inverters, converters, and freewheeling diodes for consumer, and telecommunication.</p>	
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Maximum Ratings and Electrical Characteristics at 25 °C

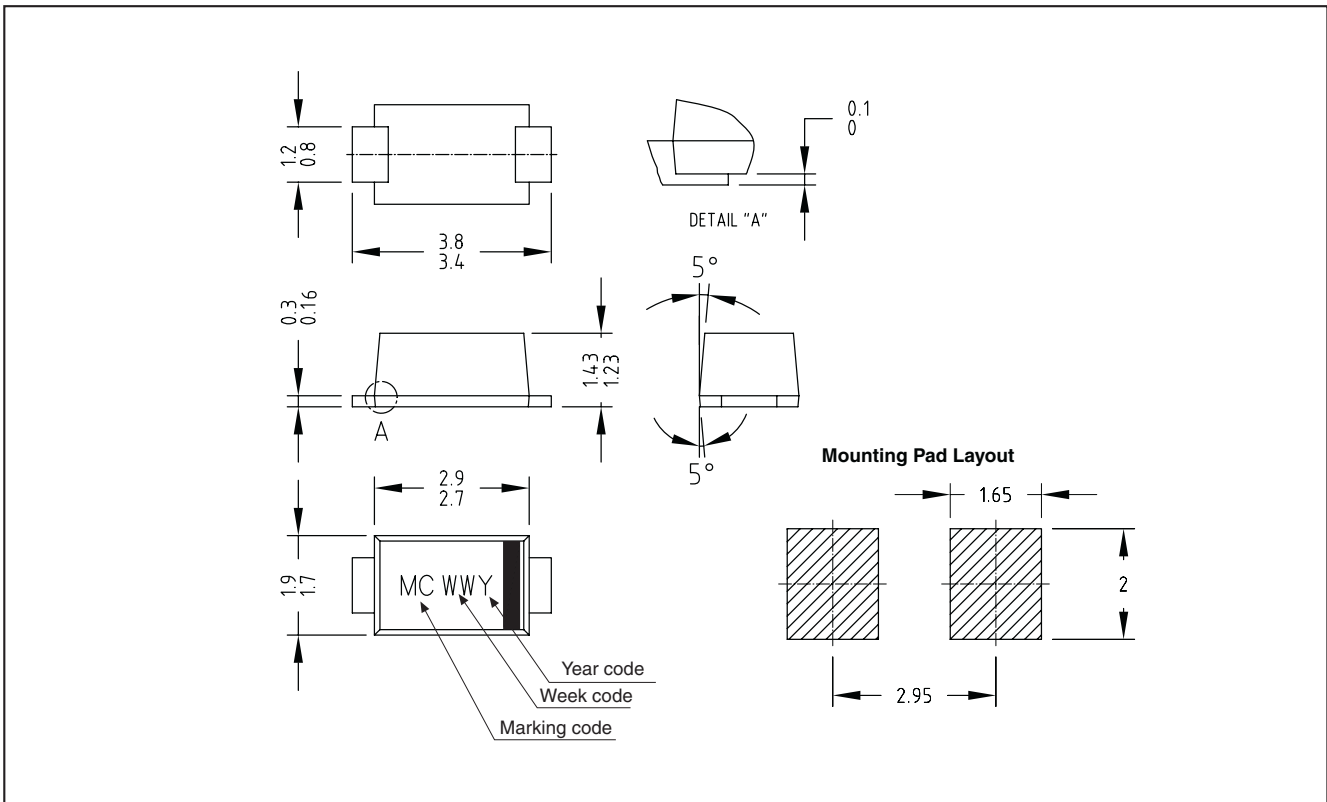
		RSFDL	RSFGL	RSFJL	RSFKL	RSFML
Marking Code		RSD	RSG	RSJ	RSK	RSM
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	200	400	600	800	1000
V_{RMS}	Maximum RMS Voltage (V)	140	280	420	560	700
V_{DC}	Maximum DC Blocking Voltage (V)	200	400	600	800	1000
$I_{F(AV)}$	Maximum average Forward Rectified Current See Fig. 1 at $T_L = 55\text{ °C}$	0.5 A				
I_{FSM}	Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	10 A				
I_R	Maximum Full Load Reverse Current, Full cycle Average $T_A = 55\text{ °C}$	30 μ A				
V_F	Maximum Instantaneous Forward Voltage at 0.5 A	1.3 V				
I_R	Maximum DC Reverse Current @ $T_A = 25\text{ °C}$ at Rated DC Blocking Voltage @ $T_A = 125\text{ °C}$	5 μ A 50 μ A				
T_{rr}	Maximum Reverse Recovery Time (0.5/1/0.25A)	150 nS		250 nS		500 nS
C_j	Typical Junction Capacitance (1MHz; -4V)	4.0 pF				
$R_{th(j-a)}$ $R_{th(j-l)}$	Typical Thermal Resistance (5x5 mm ² Copper Pad Areas)	150 °C/W 32 °C/W				
T_j	Operating Temperature Range	-55 to + 150 °C				
T_{stg}	Storage Temperature Range	-55 to + 150 °C				

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Ordering information

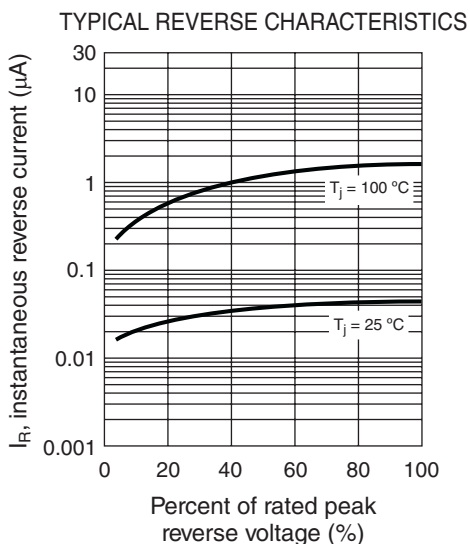
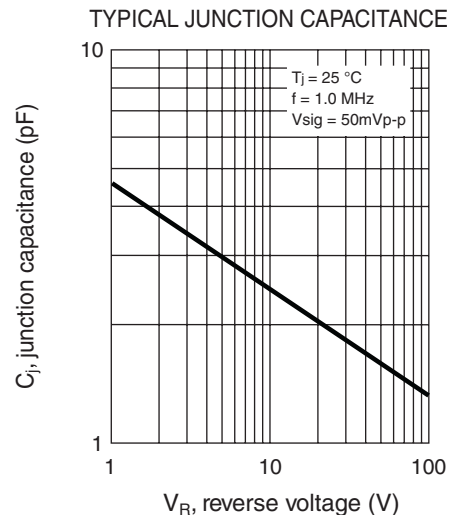
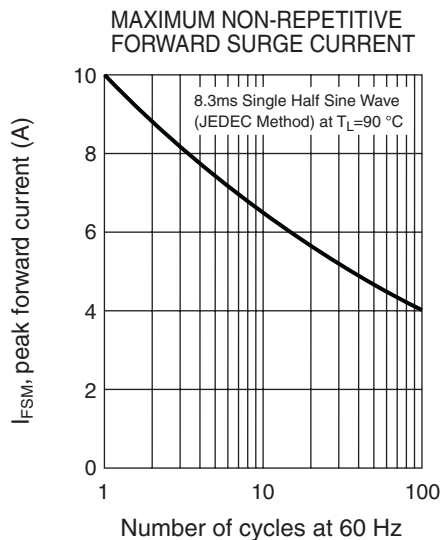
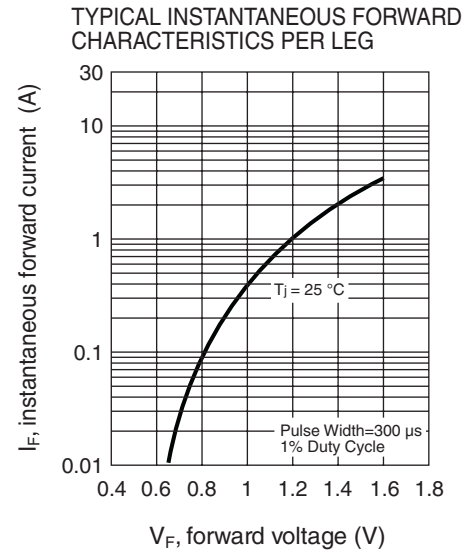
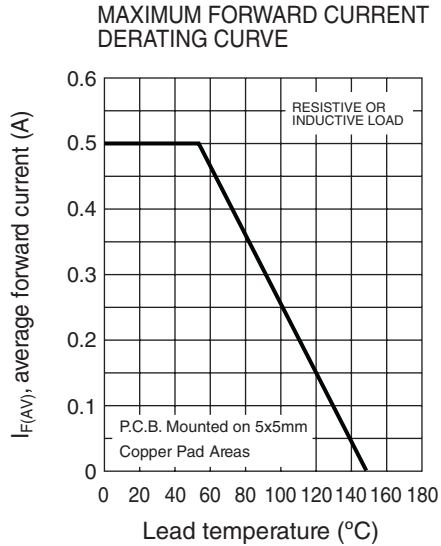
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
RSFJL TRTB	TRTB	13" diameter tape and reel	7,500	0.0196
RSFJL TRTS	TRTS	8" diameter tape and reel	1,800	0.0196

Package Outline Dimensions: (mm) DO-219AA / M1F

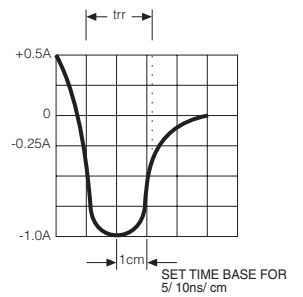
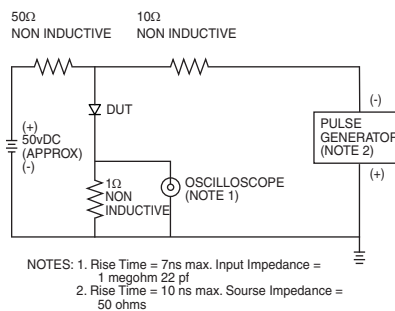


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Ratings and Characteristics (Ta 25 °C unless otherwise noted)



REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



- NOTES: 1. Rise Time = 7ns max. Input Impedance = 1 megohm 22 pf
 2. Rise Time = 10 ns max. Source Impedance = 50 ohms

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