




1.5 Amp. Surface Mounted Glass Passivated Fast Recovery Rectifier

<p>DO-214AA (SMB)</p> 	<p>Voltage 50 V to 1000 V</p> <p>Current 1.5 A</p> <p>HYPERECTIFIER®</p>
<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 • AEC-Q101 qualified • 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 	
  <p>RoHS COMPLIANT</p>	
<p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case: DO-214AA (SMB). 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>	

Maximum Ratings and Electrical Characteristics at 25 °C

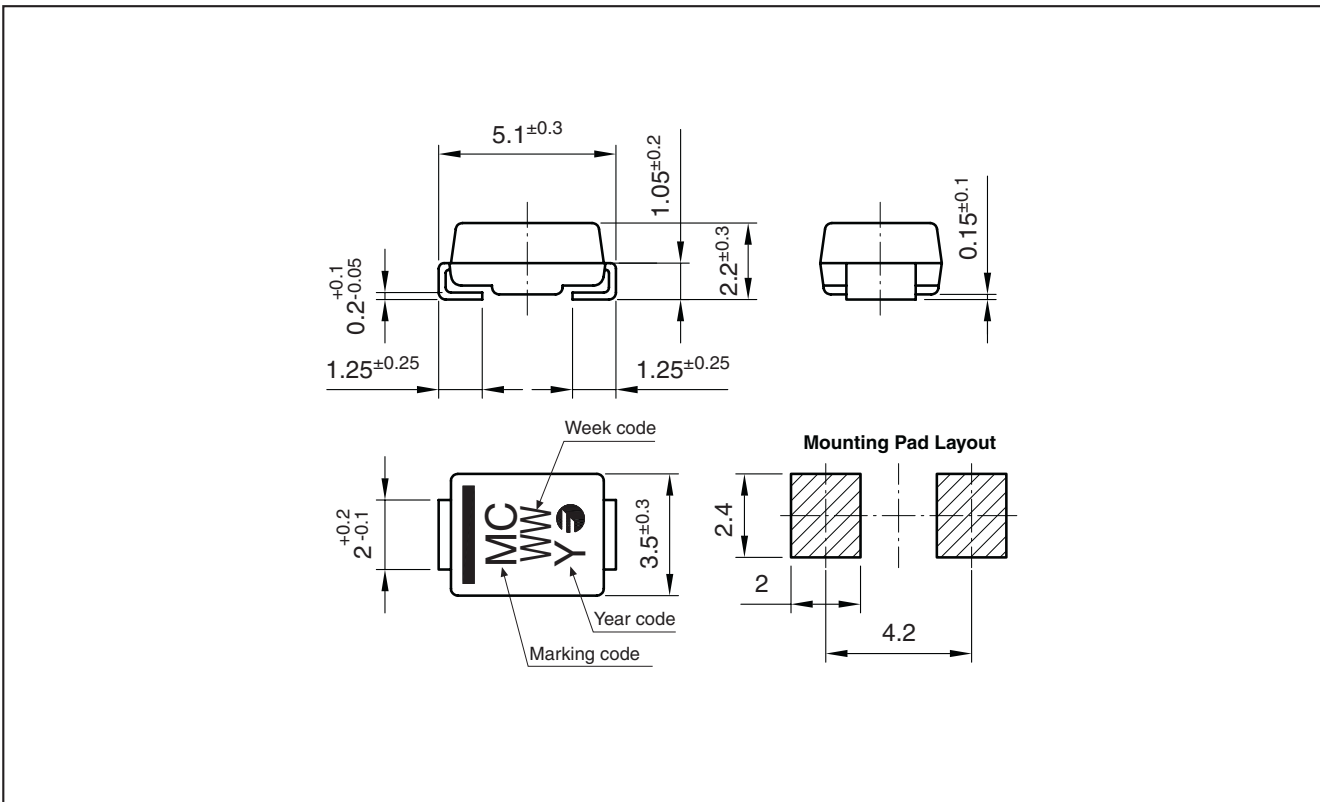
		FRS2A	FRS2B	FRS2D	FRS2G	FRS2J	FRS2K	FRS2M
Marking Code		G1	G2	G3	G4	G5	G6	G7
V _{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	50	100	200	400	600	800	1000
V _{RMS}	Maximum RMS Voltage (V)	35	70	140	280	420	560	700
V _{DC}	Maximum DC Blocking Voltage (V)	50	100	200	400	600	800	1000
I _{F(AV)}	Forward current at T _L = 100 °C	1.5 A						
I _{FSM}	8.3 ms. peak forward surge current (Jedec Method)	50 A						
V _F	Maximum Instantaneous Forward Voltage at 1.5 A	1.3 V						
I _R	Maximum DC Reverse Current T _j = 25 °C at Rated DC Blocking Voltage T _j = 125 °C	5 µA 200 µA						
T _{rr}	Maximum Reverse Recovery Time (0.5/1/0.25A)	150 ns				250 ns	300 ns	
C _j	Typical Junction Capacitance (1MHz; -4V)	35 pF						
R _{th(j-l)} R _{th(j-a)}	Typical thermal resistance (5x5 mm ² x 130 µm Copper Area)	20 °C/W 60 °C/W						
T _j - T _{stg}	Operating Junction and 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)
FRS2D TRTB	TRTB	13" diameter tape and reel	3,200	0.082

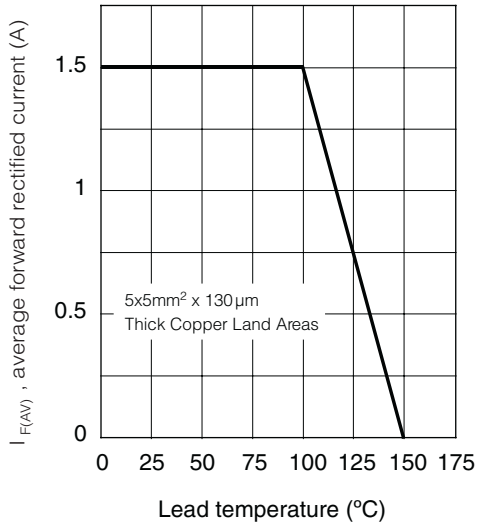
Package Outline Dimensions: (mm) DO-214AA (SMB)



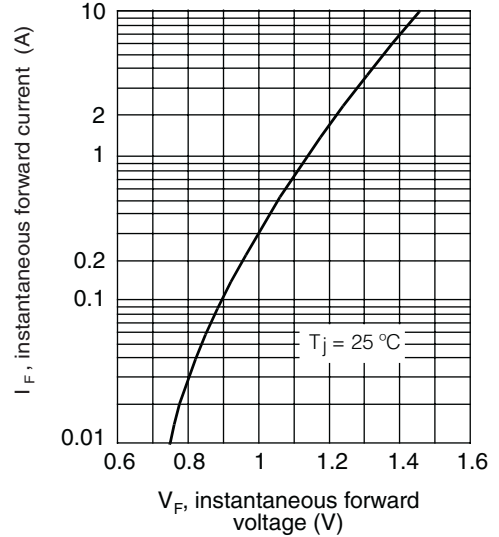
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Ratings and Characteristics (Ta 25 °C unless otherwise noted)

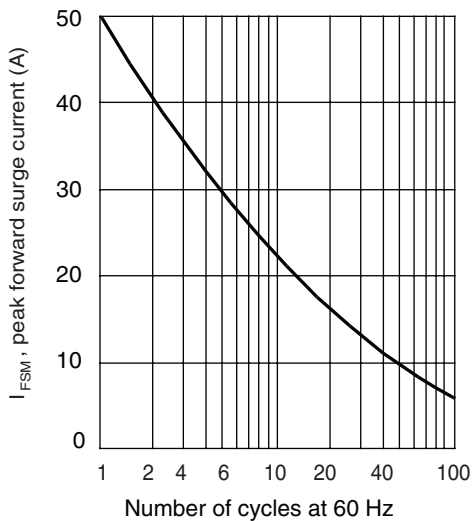
FORWARD CURRENT DERATING CURVE



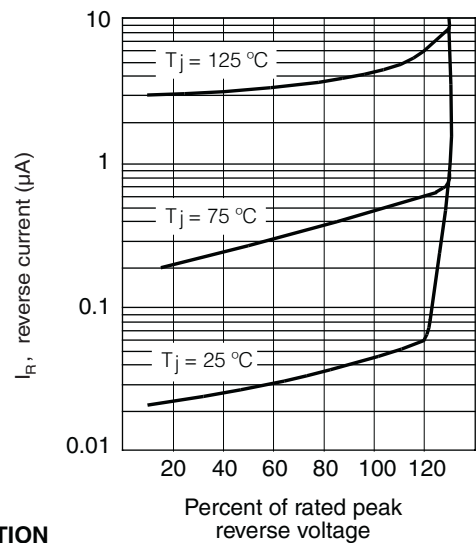
TYPICAL FORWARD CHARACTERISTIC



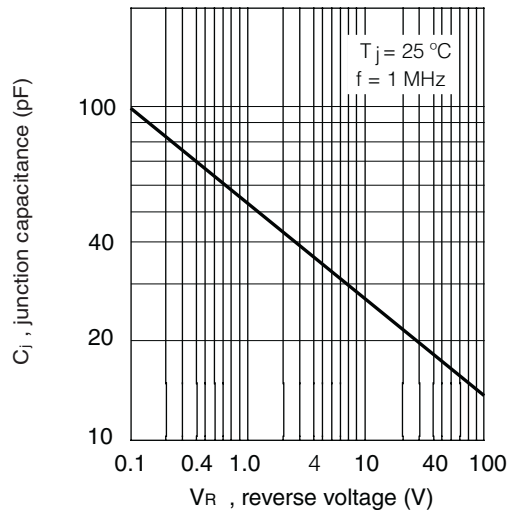
MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION CAPACITANCE



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Revision History

Date	Revision	Description of Changes
Jan-2003	0	Original Data Sheet
May-2016	1	Format update

Disclaimer

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