RoHS

HALOGEN FREE



### 1.5 Amp. Surface Mount Glass Passivated Rectifier

### **DO-214AA (SMB)**



#### Voltage Current 50 V to 1000 V 1.5 A HYPERECTIFIER

### **FEATURES**

- 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
- Component in accordance to RoHS 2011/65/EC and WEEE 2002/96/EC
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C

#### **MECHANICAL DATA**

- 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

#### **TYPICAL APPLICATIONS**

Used in general purpose rectification of power supplies, inverters, converters and freewheeling diodes application.

### Maximum Ratings and Electrical Characteristics at 25 °C

		FS2A	FS2B	FS2D	FS2G	FS2J	FS2K	FS2M
	Marking Code	S1	S2	S3	S4	S5	S6	S7
	Halogen Free Marking Code	1K	1L	1M	1N	1P	1Q	1R
V <sub>RRM</sub>	Maximum Recurrent Peak Reverse Voltage (V)	50	100	200	400	600	800	1000
V <sub>RMS</sub>	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 <sub>F(AV)</sub>	Forward Current @ T <sub>C</sub> = 100 °C	1.5 A						
I <sub>FSM</sub>	8.3 ms. peak forward surge current (Jedec Method)	50 A						
V <sub>F</sub>	Maximum Instantaneous Forward Voltage @ 1.5A	1.10 V						
I <sub>R</sub>	Maximum DC Reverse Current @Tc = 25 °C at Rated DC Blocking Voltage @Tc = 125 °C	1 μA 125 μA						
t <sub>rr</sub>	Typical Reverse Recovery Time (0.5/1/0.25A)	4 µs						
C <sub>j</sub>	Typical Junction Capacitance (1MHz; -4V)	30 pF						
R <sub>th (j-c)</sub>	Typical Thermal Resistance	20 °C/W						
R <sub>th (j-a)</sub>	(5x5 mm <sup>2</sup> x 130 μ Copper Area)	60 °C/W						
T <sub>j</sub> _ T <sub>stg</sub>	Operating Junction and Storage Temperature Range	-55 to + 150 °C						

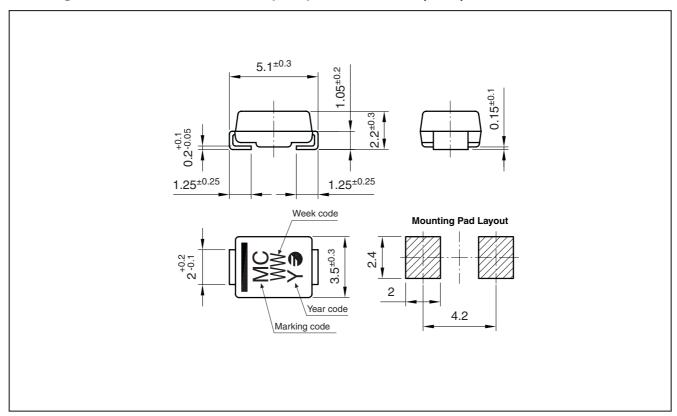


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# **Ordering information**

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FS2M TRTB	TRTB	13" diameter tape and reel	3,000	0.0823
FS2M HF TRTB	TRTB	13" diameter tape and reel	3,000	0.0823

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

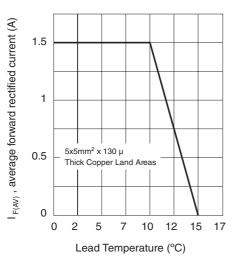




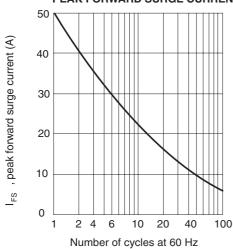
# 1.5 Amp. Surface Mount Glass Passivated Rectifier

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

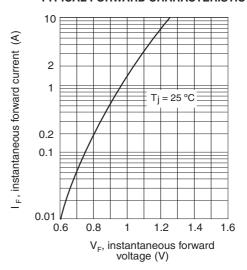
#### FORWARD CURRENT DERATING CURVE



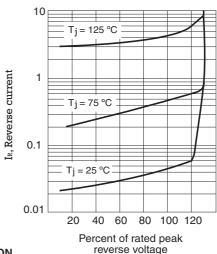
# MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



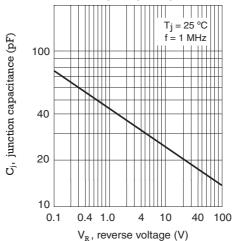
#### TYPICAL FORWARD CHARACTERISTIC



### TYPICAL REVERSE CHARACTERISTIC









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