






## 1.5 Amp. Surface Mount Glass Passivated Rectifier

<b>DO-214AC (SMA)</b>  	<b>Voltage</b> 1000 V	<b>Current</b> 1.5 A	
			
	<b>FEATURES</b> <ul style="list-style-type: none"> <li>• Low profile package</li> <li>• Ideal for automated placement</li> <li>• Low forward voltage drop</li> <li>• High forward surge current capability</li> <li>• Solder dip 260°C, 10s</li> <li>• AEC-Q101 qualified</li> <li>• Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC</li> <li>• Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C</li> <li>• Low leakage current</li> </ul>		   <b>RoHS COMPLIANT</b>
	<b>MECHANICAL DATA</b> <ul style="list-style-type: none"> <li>• <b>Case:</b> DO-214AC (SMA). Epoxy meets UL 94V-0 flammability rating.</li> <li>• <b>Polarity:</b> Color band denotes cathode end.</li> <li>• <b>Terminals:</b> 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. HE3 suffix for high reliability grade, meets JESD 201 class 2 whisker test.</li> </ul>		
<b>TYPICAL APPLICATIONS</b> Used in general purpose rectification of power supplies, inverters, converters and freewheeling diodes for consumer, automotive and telecommunication.			

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

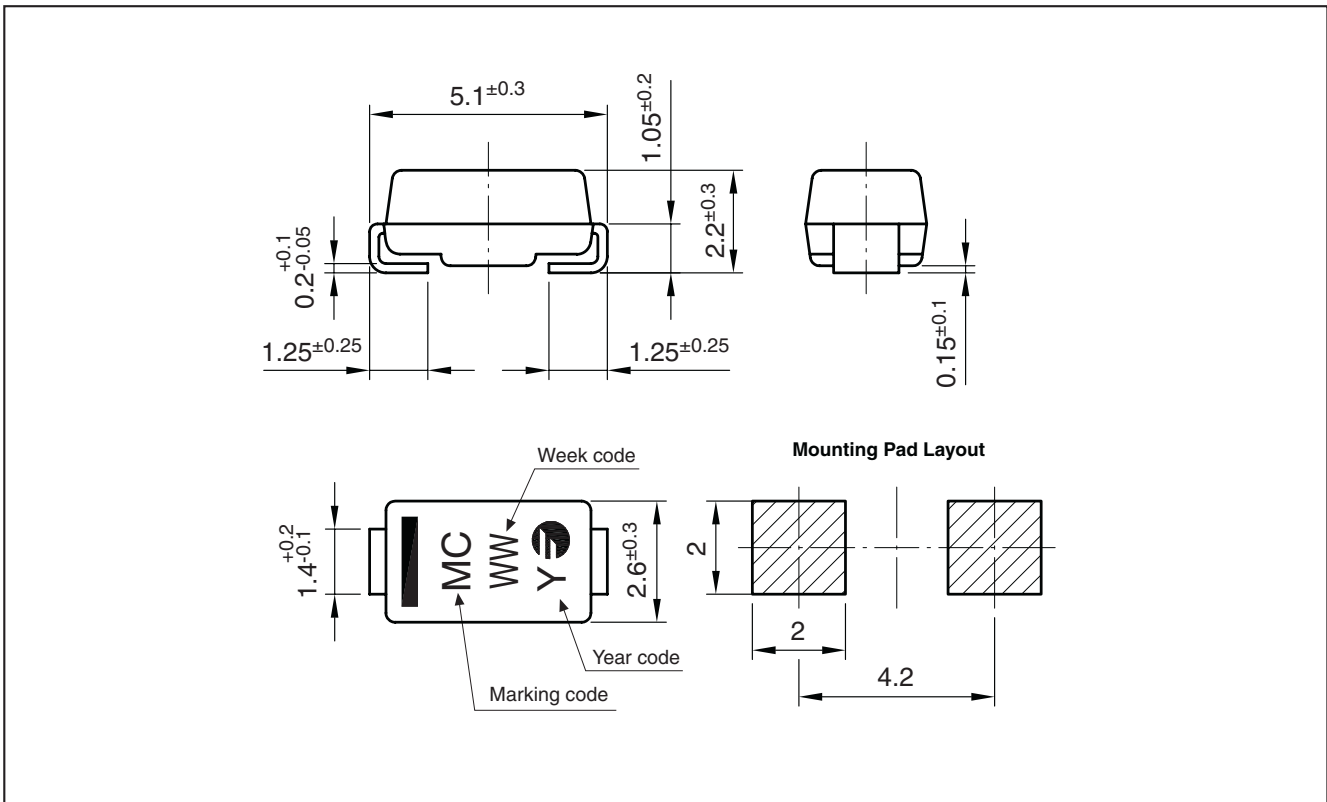
Marking Code		FS1MI
		R8
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage (V)	1000
$V_{RMS}$	Maximum RMS Voltage (V)	700
$V_{DC}$	Maximum DC Blocking Voltage (V)	1000
$I_{F(AV)}$	Forward current at $T_c = 110\text{ }^\circ\text{C}$ at $T_c = 100\text{ }^\circ\text{C}$	1.0 A 1.5 A
$I_{FSM}$	8.3 ms. peak forward surge current (Jedec Method) 10 ms. single half sine-wave	50 A 30 A
$V_F$	Maximum Instantaneous Forward Voltage at 1.0A at 1.5A	1.1 V 1.5 V
$I_R$	Maximum DC Reverse Current at Rated DC Blocking Voltage	1 $\mu\text{A}$ 25 $\mu\text{A}$ 50 $\mu\text{A}$
$T_{rr}$	Maximum Reverse Recovery Time (0.5/1/0.25A)	4 $\mu\text{s}$
$C_j$	Typical Junction Capacitance (1MHz; -4V)	8 pF
$R_{th(j-c)}$	Typical Thermal Resistance	27 $^\circ\text{C/W}$
$R_{th(j-a)}$	(5x5 mm <sup>2</sup> x 130 $\mu$ Copper Area)	75 $^\circ\text{C/W}$
$T_j - T_{stg}$	Operating Junction and Storage Temperature Range	-55 to + 150 $^\circ\text{C}$

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**Ordering information**

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FS1MI TRTB	TRTB	13" diameter tape and reel	7,500	0.060
FS1MI HE3 TRTB	TRTB	13" diameter tape and reel	7,500	0.060

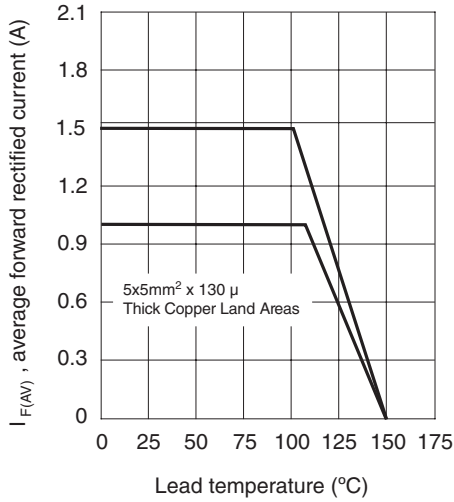
**Package Outline Dimensions: (mm) DO-214AC (SMA)**



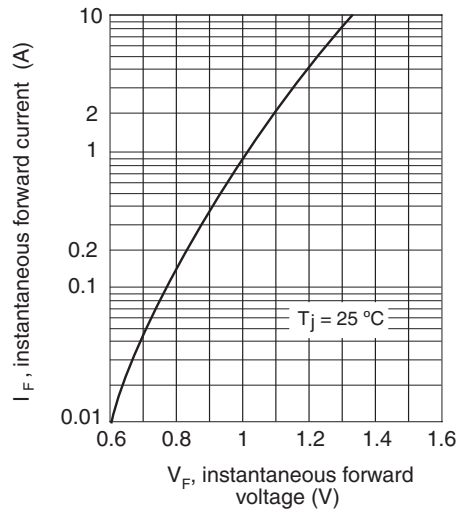
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**Ratings and Characteristics (Ta 25 °C unless otherwise noted)**

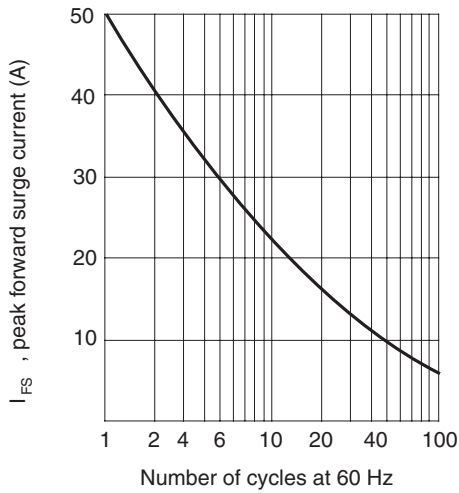
FORWARD CURRENT DERATING CURVE



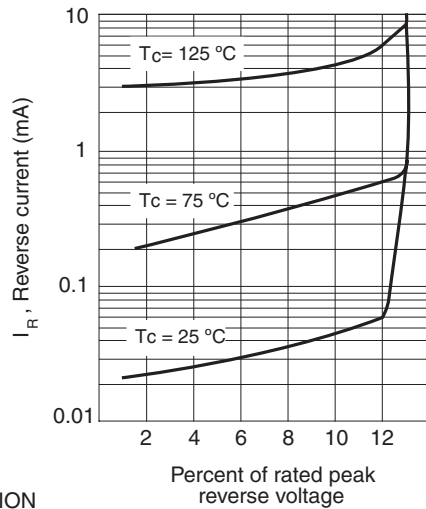
TYPICAL FORWARD CHARACTERISTIC



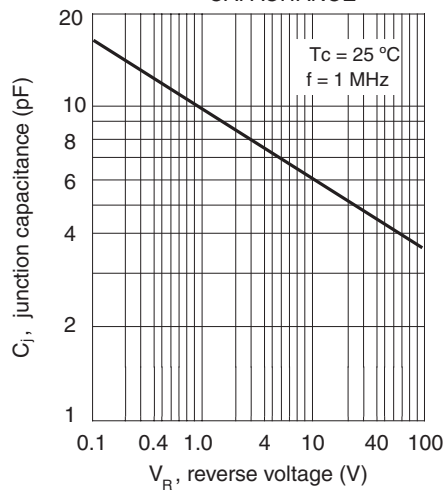
MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION CAPACITANCE



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