

## 5.0 Amp. Surface Mount Glass Passivated Rectifier

<b>DO-214AB (SMC)</b> 	<b>Voltage</b> 50 V to 1000 V 	<b>Current</b> 5.0 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>MECHANICAL DATA</b> <ul style="list-style-type: none"> <li>• <b>Case:</b> DO-214AB (SMC). 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.</li> <li>• <b>HE3 suffix</b> 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.		

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

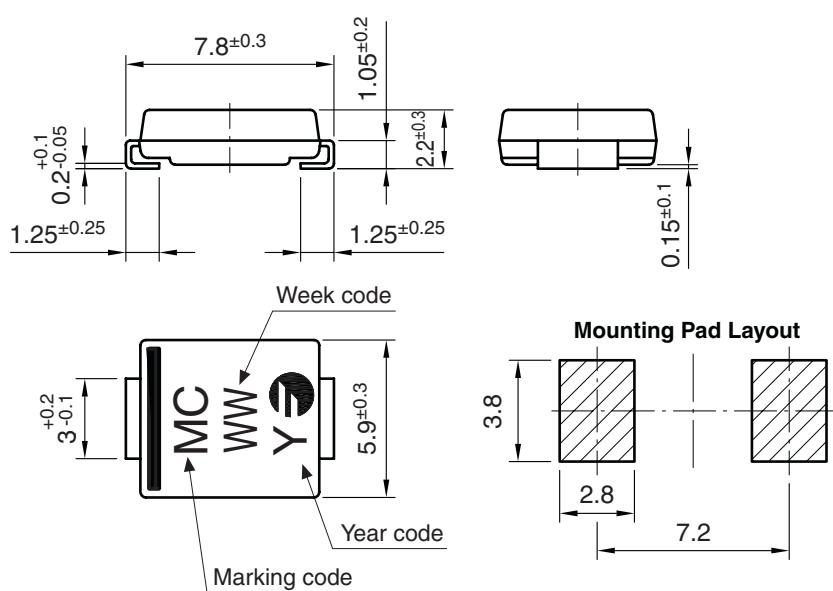
		<b>FS5A</b>	<b>FS5B</b>	<b>FS5D</b>	<b>FS5G</b>	<b>FS5J</b>	<b>FS5K</b>	<b>FS5M</b>						
<b>Marking Code</b>		<b>O1</b>	<b>O2</b>	<b>O3</b>	<b>O4</b>	<b>O5</b>	<b>O6</b>	<b>O7</b>						
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage (V)	50	100	200	400	600	800	1000						
$V_{RMS}$	Maximum RMS Voltage (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 $T_C = 75^\circ C$	5.0 A												
$I_{FSM}$	8.3 ms. peak forward surge current (Jedec Method)	100 A												
$V_F$	Maximum Instantaneous Forward Voltage at 5.0A	1.15 V												
$I_R$	Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_C = 25^\circ C$	10 $\mu A$											
		$T_C = 125^\circ C$	250 $\mu A$											
$C_j$	Typical Junction Capacitance (1MHz; -4V)	60 pF												
$R_{th(j-l)}$	Typical Thermal Resistance	13 °C/W												
$R_{th(j-a)}$	(5x5 mm <sup>2</sup> x 130 $\mu$ Copper Area)	47 °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)
FS5J TRTB	TRTB	13" diameter tape and reel	3,500	0.201
FS5J HE3 TRTB	TRTB	13" diameter tape and reel	3,500	0.201

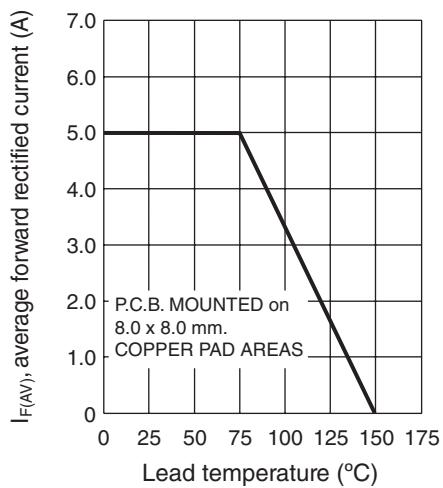
### Package Outline Dimensions: (mm) DO-214AB (SMC)



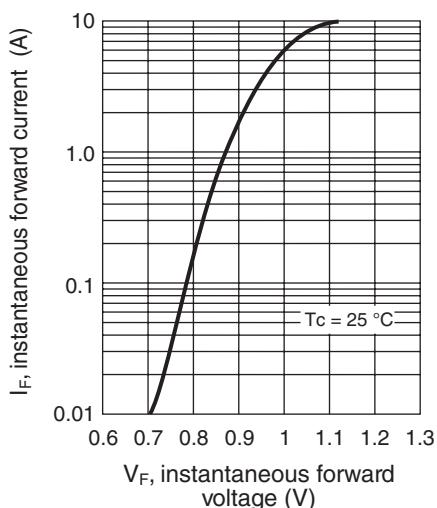
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### Ratings and Characteristics (Ta 25 °C unless otherwise noted)

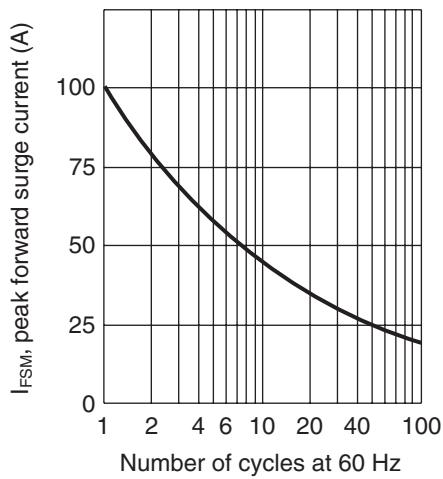
FORWARD CURRENT DERATING CURVE



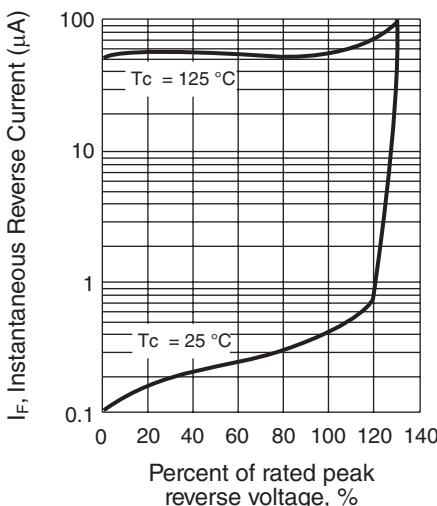
TYPICAL FORWARD CHARACTERISTIC



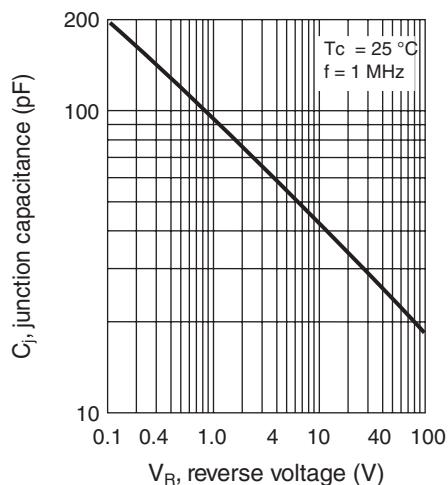
MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION CAPACITANCE



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