






**1.0 Amp. Surface Mount Glass Passivated Rectifier**

<p><b>DO-214AC / SMA</b></p> 	<p><b>Voltage</b> 400 V to 1200 V</p>	<p><b>Current</b> 1.0 A</p>	
			
	<p><b>FEATURES</b></p> <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>• Component in accordance to RoHS 2002/95/EC 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>
	<p><b>MECHANICAL DATA</b></p> <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 (AEC Q101 qualified), meets JESD 201 class 2 whisker test.</li> </ul>		
<p><b>TYPICAL APPLICATIONS</b></p> <p>Used in general purpose rectification of power supplies, inverters, converters and freewheeling diodes for consumer, automotive and telecommunication.</p>			

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

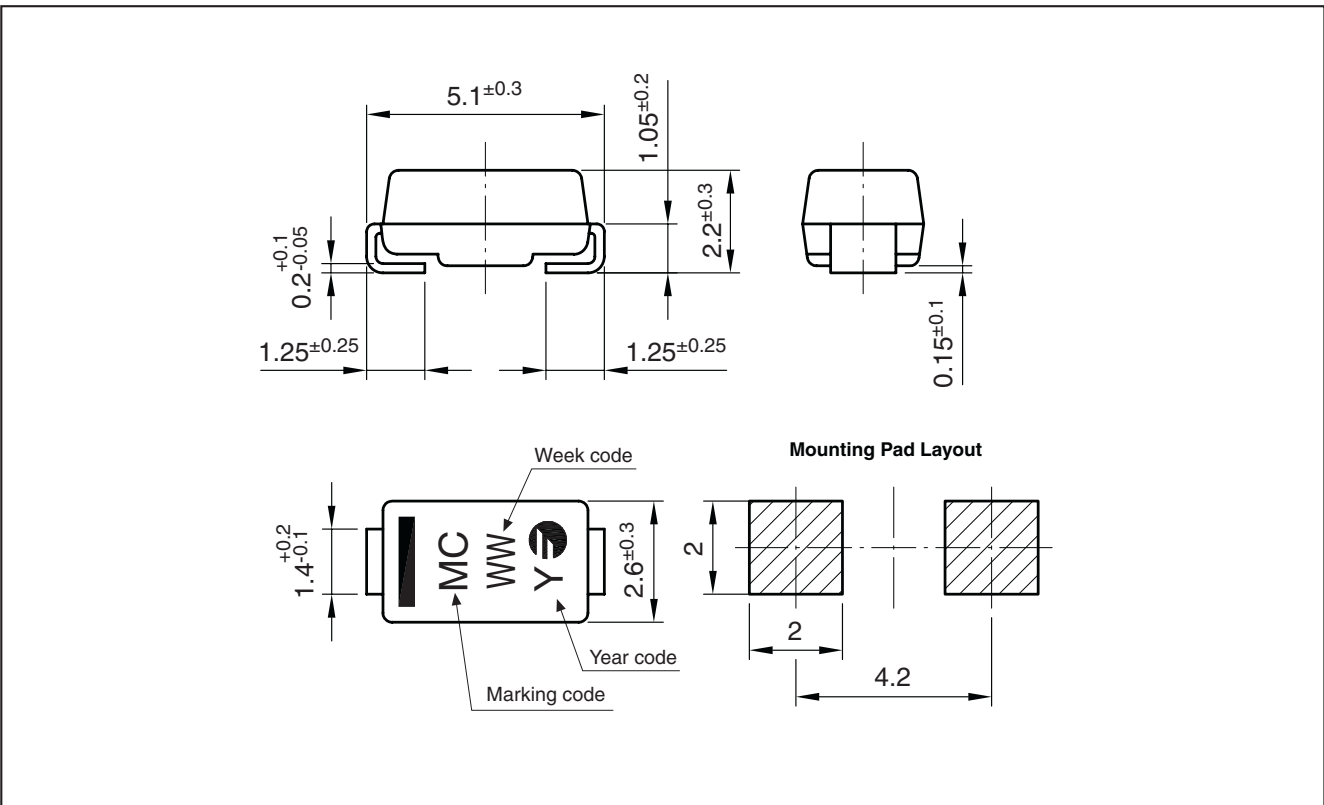
		<b>FS1G</b>	<b>FS1J</b>	<b>FS1K</b>	<b>FS1M</b>	<b>FS1Q</b>
Marking Code		<b>R4</b>	<b>R5</b>	<b>R6</b>	<b>R7</b>	<b>R9</b>
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage (V)	400	600	800	1000	1200
$V_{RMS}$	Maximum RMS Voltage (V)	280	420	560	700	840
$V_{DC}$	Maximum DC Blocking Voltage (V)	400	600	800	1000	1200
$I_{F(AV)}$	Forward current at $T_L = 110\text{ °C}$	1.0 A				
$I_{FSM}$	8.3 ms. peak forward surge current (Jedec Method)	30 A				
$V_F$	Maximum Instantaneous Forward Voltage at 1.0A	1.1 V				
$I_R$	Maximum DC Reverse Current at Rated DC Blocking Voltage	1 $\mu$ A 50 $\mu$ A				
$T_{rr}$	Typical Reverse Recovery Time (0.5/1/0.25A)	1.8 $\mu$ s				
$C_j$	Typical Junction Capacitance (1MHz; -4V)	12 pF				
$R_{th(j-c)}$	Typical Thermal Resistance	27 °C/W				
$R_{th(j-a)}$	(5x5 mm <sup>2</sup> x 130 $\mu$ Copper Area)	75 °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)
FS1J TRTB	TRTB	13" diameter tape and reel	7,500	0.060
FS1J TRTS	TRTS	7" diameter tape and reel	1,500	0.060
FS1G HE3 TRTB	TRTB	13" diameter tape and reel	7,500	0.060
FS1G HE3 TRTS	TRTS	7" diameter tape and reel	1,500	0.060

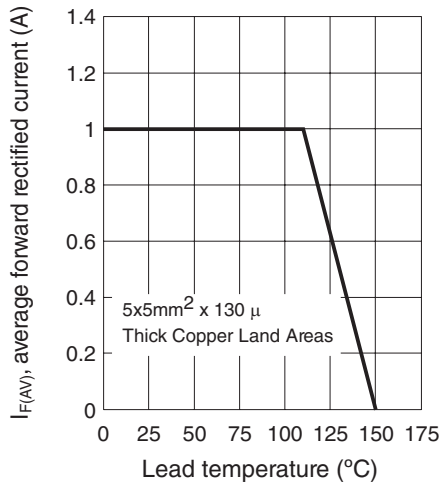
**Package Outline Dimensions: (mm) DO-214AC / SMA**



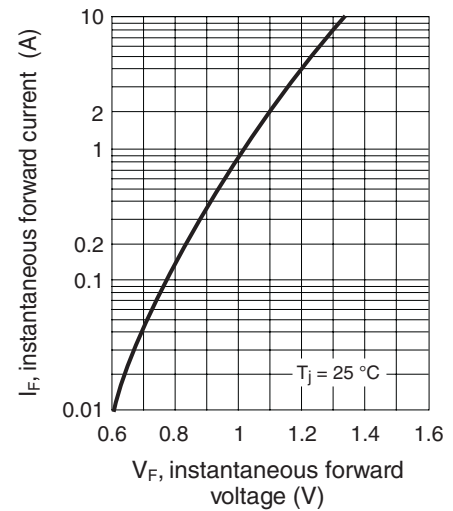
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**Ratings and Characteristics (Ta 25 °C unless otherwise noted)**

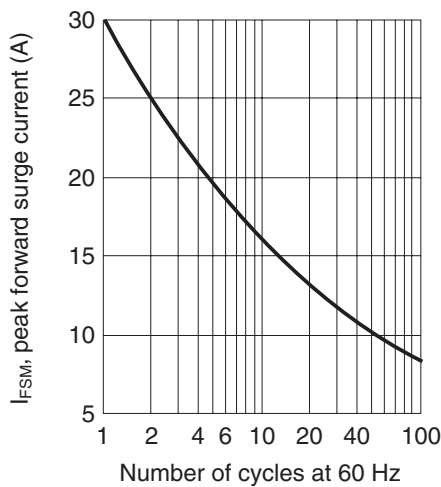
FORWARD CURRENT DERATING CURVE



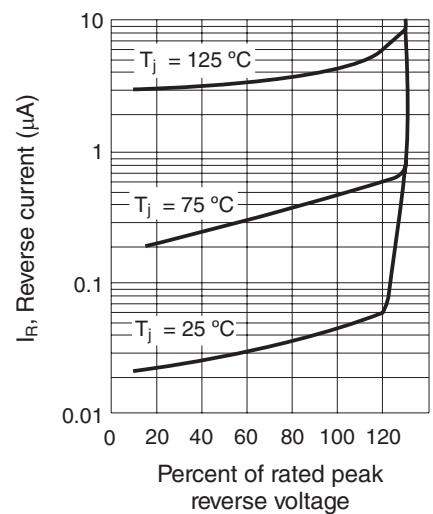
TYPICAL FORWARD CHARACTERISTIC



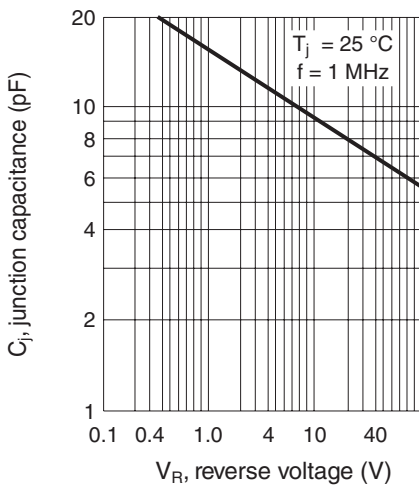
MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



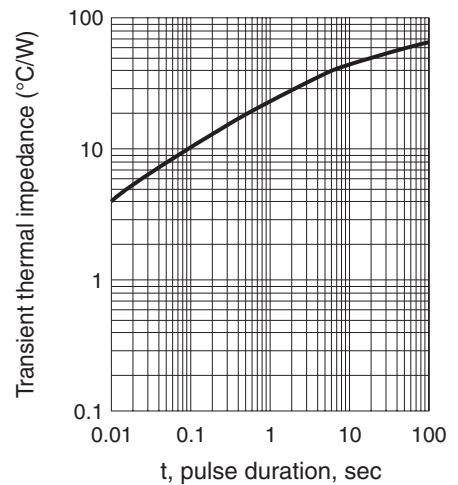
TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION CAPACITANCE



TYPICAL TRANSIENT THERMAL IMPEDANCE



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