



# SM SERIES

3 to 5kV, 270 to 900mA, 65nS  
Surface Mount Diodes



## Features

- J Lead or Gullwing Package Option
- Fast Reverse Recovery Time for High Efficiency
- Molded Plastic Body, ANSI/UL94 V-0 Rated Material

## Specifications<sup>1</sup>

Part Number	V <sub>RRM</sub> V	I <sub>FAVM1</sub> <sup>2</sup> mA	I <sub>FAVM2</sub> <sup>2</sup> mA	V <sub>F</sub> V	I <sub>R</sub> μA	I <sub>FSM</sub> A	C <sub>J</sub> pF	T <sub>RR</sub> <sup>2</sup> nS	R <sub>θJL</sub> °C/W
<b>J Lead Subseries (Figure 1)</b>									
<b>SM3F</b>	3000	900	350	3.7	0.5	10	6	65	27
<b>SM5F</b>	5000	270	-	5.7	0.5	10	8	65	27
<b>Gullwing Subseries (Figure 2)</b>									
<b>SM3FG</b>	3000	900	350	3.7	0.5	10	6	65	27
<b>SM5FG</b>	5000	270	-	5.7	0.5	10	8	65	27

Temperature °C	
<b>Storage Temperature</b>	-55 to 175
<b>Operating Temperature</b>	-55 to 150
<b>Maximum Junction Temperature</b>	150

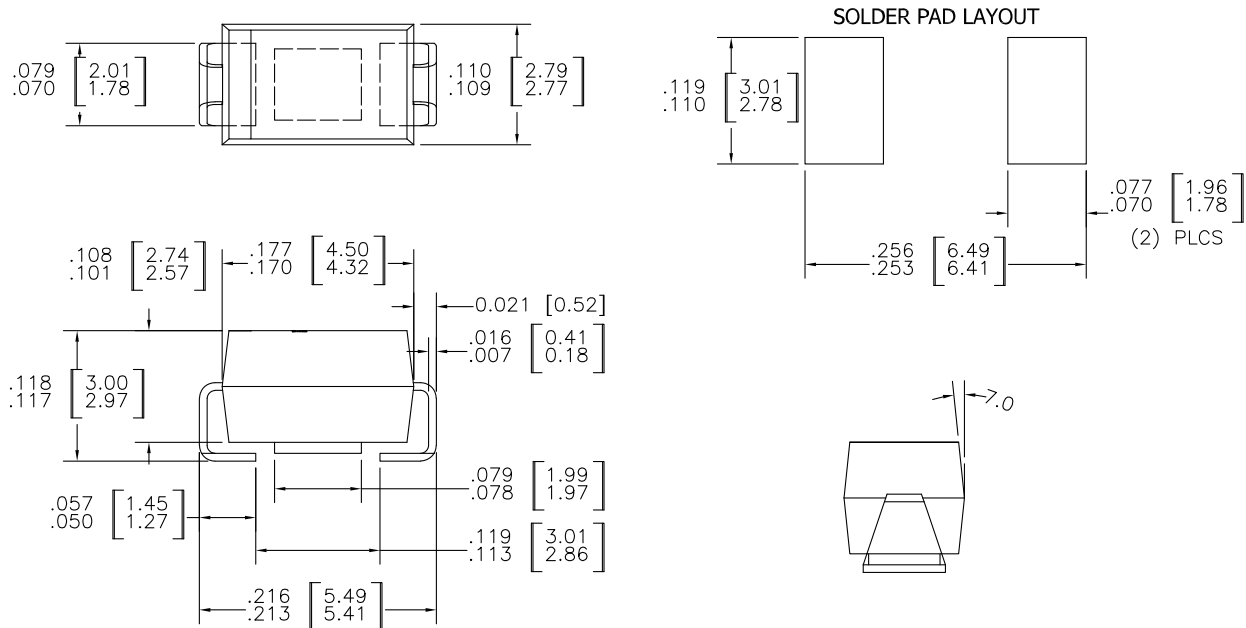
<sup>1</sup>25°C ambient temperature unless stated otherwise.

<sup>2</sup>Check Specification Definitions for conditions details.

## Drawings

Dimensions in inches [mm], tolerances ±0.020 except as noted

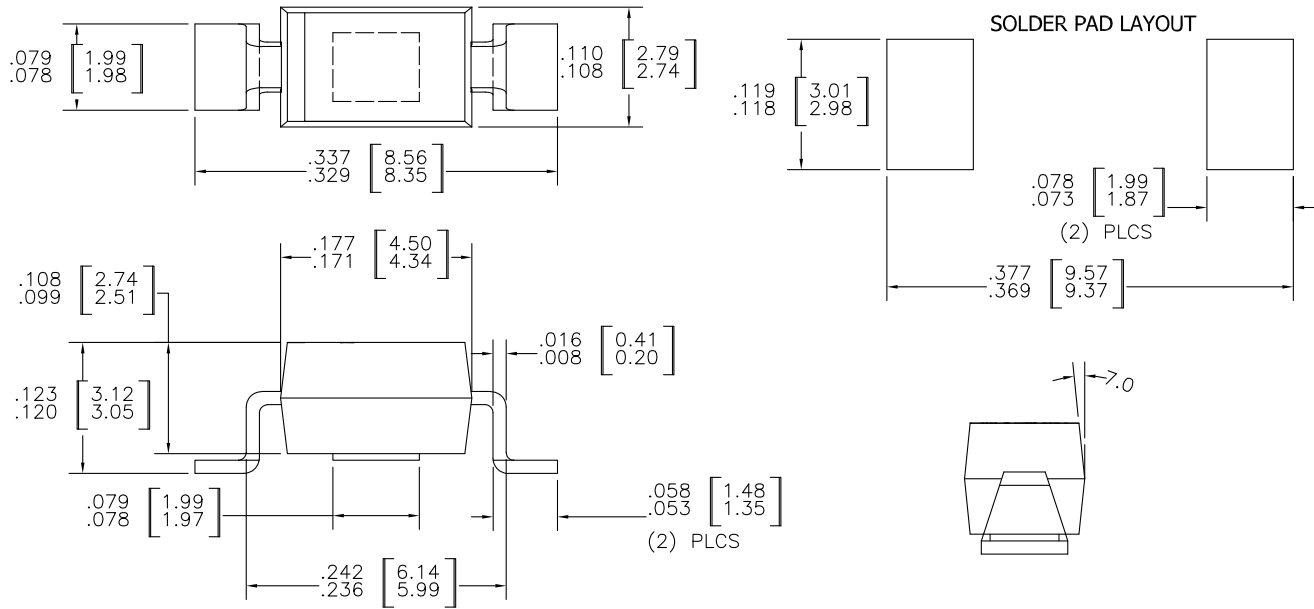
**Figure 1**



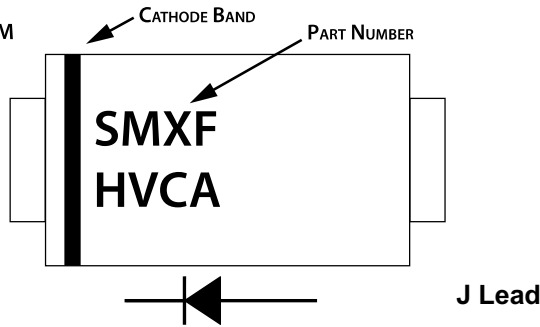


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### Figure 2

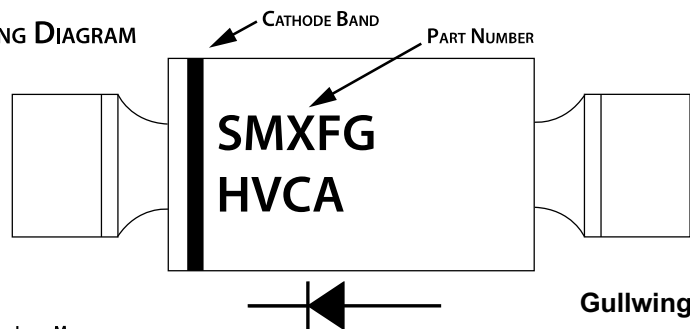


### MARKING DIAGRAM

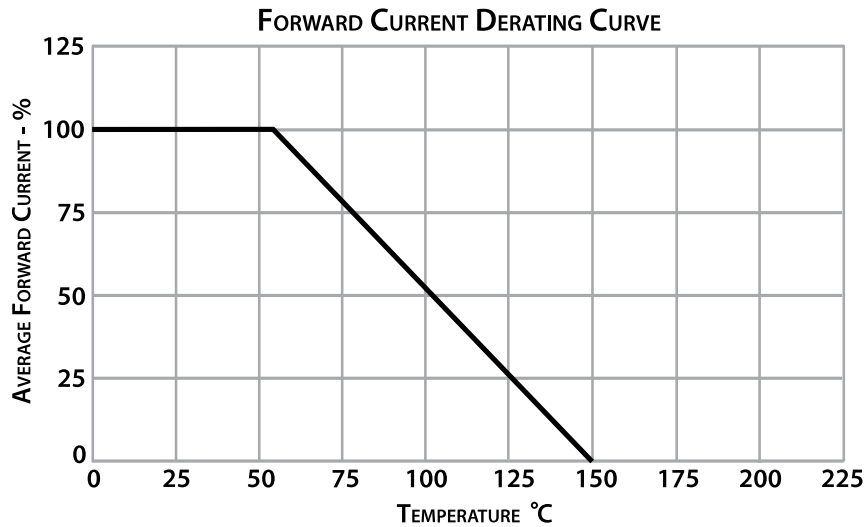


MARKING TYPE: LASER MARKED  
(MARKINGS ARE SUBJECT TO MINOR CHANGES)

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## Specification Definitions

Specifications		Conditions
<b>V<sub>RRM</sub></b>	Maximum Repetitive Reverse Voltage	-
<b>I<sub>FAVM1</sub></b>	Maximum Average Forward Current	At T <sub>L</sub> = 55°C
<b>I<sub>FAVM2</sub></b>	Maximum Average Forward Current	At T <sub>L</sub> = 100°C
<b>V<sub>F</sub></b>	Maximum Forward Voltage Drop	At I <sub>F</sub> = 100mA
<b>I<sub>R</sub></b>	Maximum Leakage Current	At V <sub>RRM</sub>
<b>I<sub>FSM</sub></b>	Maximum Surge Current	At 8.3 mS, Single Half Sine
<b>C<sub>J</sub></b>	Typical Junction Capacitance	At V <sub>R</sub> = 0VDC, f = 1MHz
<b>T<sub>RR</sub></b>	Maximum Reverse Recovery Time	I <sub>F</sub> = 0.5 I <sub>FAVM1</sub> ; I <sub>R</sub> = - I <sub>FAVM1</sub> ; I <sub>RR</sub> = -0.25 I <sub>FAVM1</sub> (SM3G, SM3FG) I <sub>F</sub> = 40mA; I <sub>R</sub> = -80mA; I <sub>RR</sub> = -20mA (SM5G, SM5FG)
<b>R<sub>θJL</sub></b>	Typical Thermal Resistance	Device Mounted on 0.2" x 0.2" (5mm x 5mm) Copper Solder Pads

Note: Specifications subject to change without notice. Photo is representation only.

