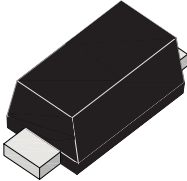




### 0.8 Amp. Surface Mounted Glass Passivated Fast Recovery Rectifier

<p><b>SOD123W</b></p> 	<p><b>Voltage</b> 200 V to 1000 V</p>	<p><b>Current</b> 0.8 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 power losses, high efficiency</li> <li>• High surge current capability</li> <li>• Cavity-free glass-passivated junction</li> <li>• Low forward voltage drop</li> <li>• Solder dip 260°C, 10s</li> <li>• AEC-Q101 qualified</li> <li>• Fast switching for high efficiency</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> </ul>		  <b>RoHS</b> COMPLIANT
	<p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>• <b>Case:</b> SOD123W. 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> </ul>		
	<p><b>TYPICAL APPLICATIONS</b></p> <p>For use in fast switching rectification of power supply, inverters, converters, and freewheeling diodes for consumer, and telecommunication.</p>		

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

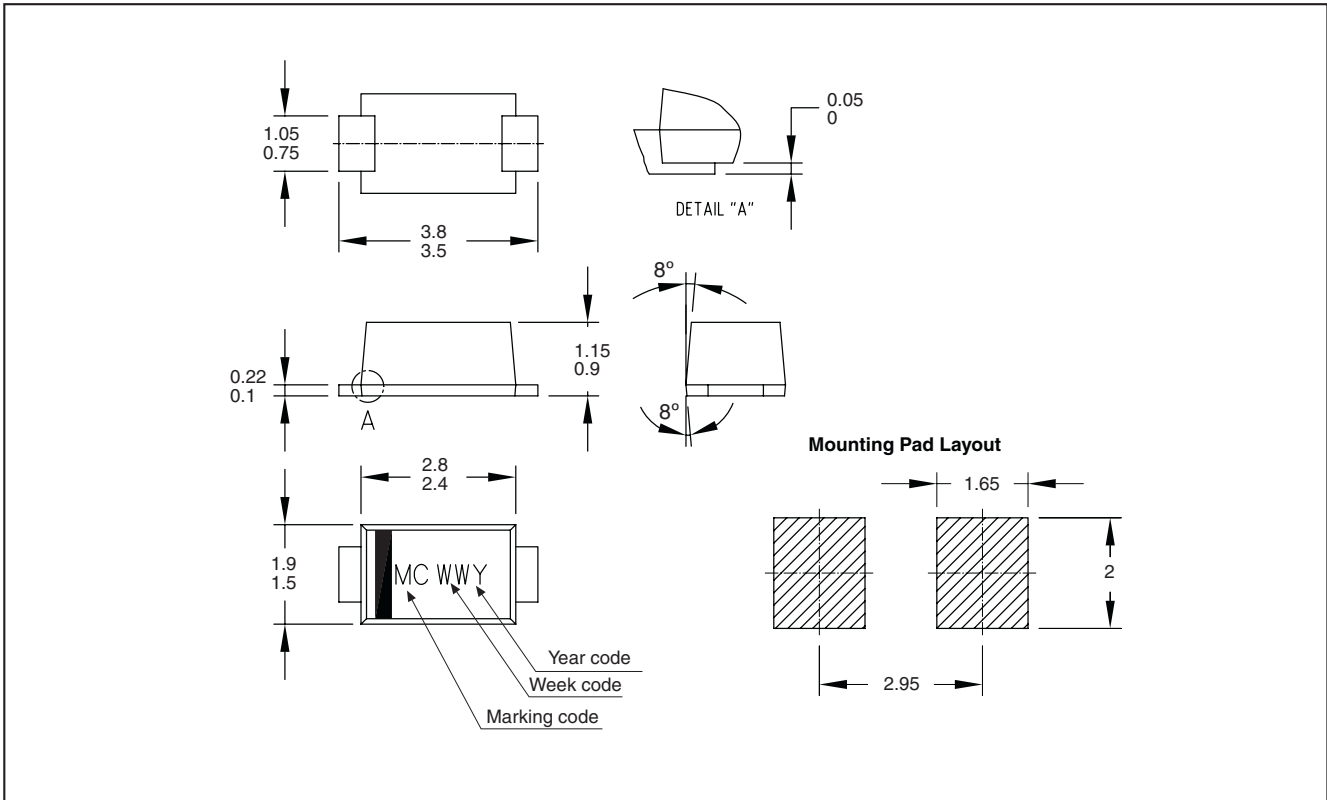
		FRS1DW	FRS1GW	FRS1JW	FRS1KW	FRS1MW
Marking Code		3J	3K	3L	3M	3N
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage (V)	200	400	600	800	1000
$V_{RMS}$	Maximum RMS Voltage (V)	140	280	420	560	700
$V_{DC}$	Maximum DC Blocking Voltage (V)	200	400	600	800	1000
$I_{F(AV)}$	Forward current at $T_C = 55\text{ °C}$	0.8 A				
$I_{FSM}$	8.3 ms. peak forward surge current (Jedec Method)	30 A				
$V_F$	Maximum Instantaneous Forward Voltage at 0.8 A	1.3 V				
$I_R$	Maximum DC Reverse Current at Rated DC Blocking Voltage	5 $\mu$ A 50 $\mu$ A				
$T_{rr}$	Maximum Reverse Recovery Time (0.5/1/0.25A)	150 ns	250 ns		500 ns	
$C_j$	Typical Junction Capacitance (1MHz; -4V)	8 pF				
$R_{th(j-l)}$ $R_{th(j-a)}$	Typical thermal resistance (5x5 mm <sup>2</sup> x 130 $\mu$ m Copper Area)	27 °C/W 75 °C/W				
$T_j - T_{stg}$	Operating Junction and Storage Temperature Range	-55 to + 150 °C				

**0.8 Amp. Surface Mounted Glass Passivated Fast Recovery Rectifier**

### Ordering information

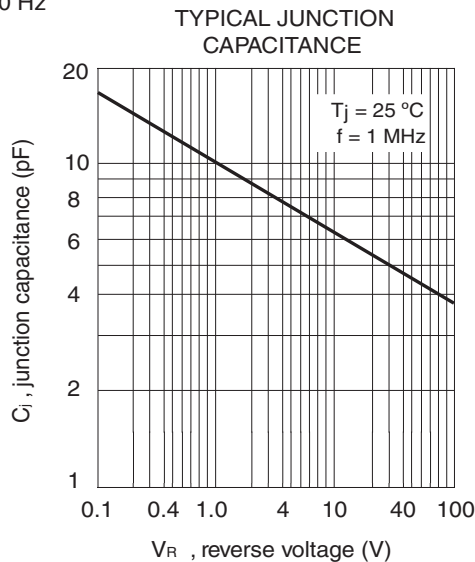
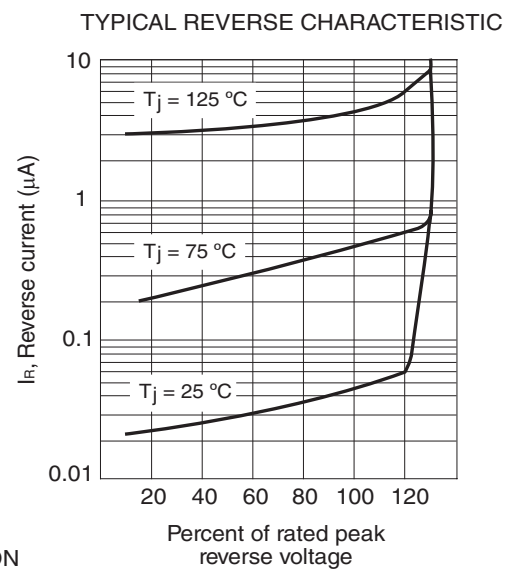
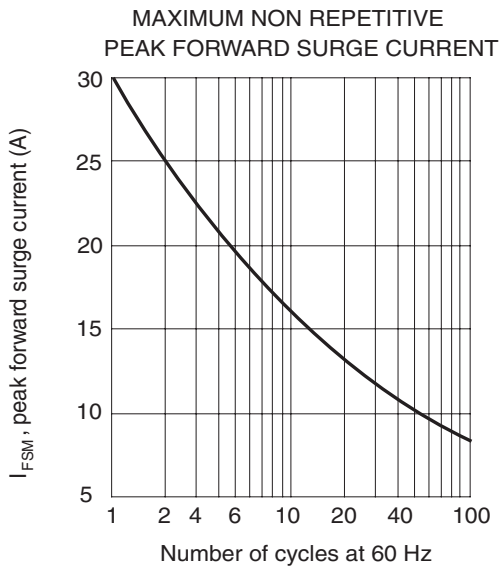
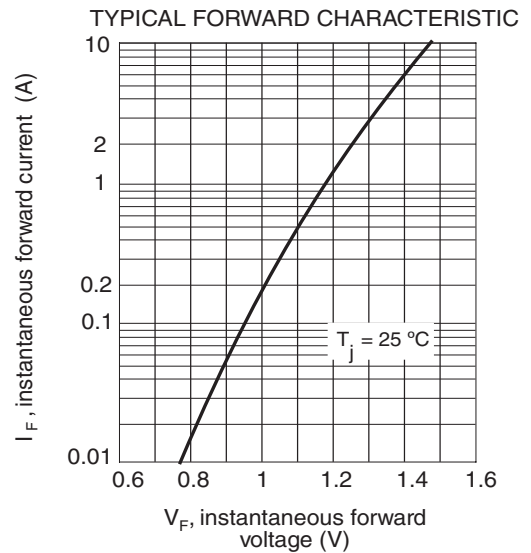
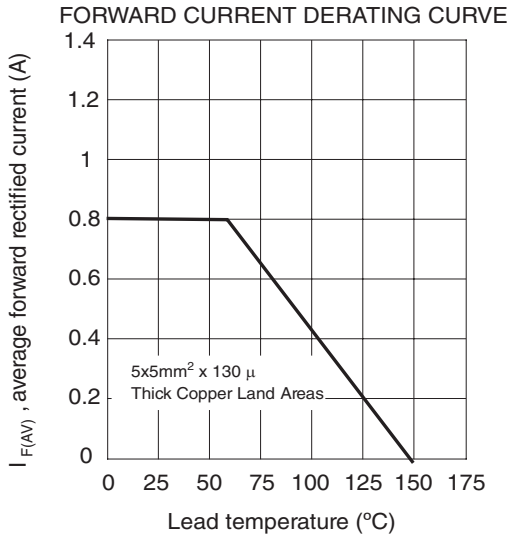
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FRS1GW TRTB	TRTB	13" diameter tape and reel	10,000	0.0165

### Package Outline Dimensions: (mm) SOD123W



### 0.8 Amp. Surface Mounted Glass Passivated Fast Recovery Rectifier

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



**0.8 Amp. Surface Mounted Glass Passivated Fast Recovery Rectifier****Revision History**

<b>Date</b>	<b>Revision</b>	<b>Description of Changes</b>
29-Apr-2013	0	Original Data Sheet

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