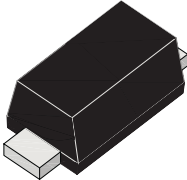


0.8 Amp. Surface Mounted Glass Passivated Fast Recovery Rectifier

<p style="text-align: center;">SOD123W</p> 	Voltage 200 V to 1000 V	Current 0.8 A
	FEATURES <ul style="list-style-type: none"> • Low profile package • Ideal for automated placement • Low power losses, high efficiency • High surge current capability • Cavity-free glass-passivated junction • Low forward voltage drop • Solder dip 260°C, 10s • AEC-Q101 qualified • Fast switching for high efficiency • Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC • Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C 	
	MECHANICAL DATA <ul style="list-style-type: none"> • Case: SOD123W. Epoxy meets UL 94V-0 flammability rating. • Polarity: Color band denotes cathode end. • Terminals: 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. 	
	TYPICAL APPLICATIONS For use in fast switching rectification of power supply, inverters, converters, and freewheeling diodes for consumer, and telecommunication.	

AUTOMOTIVE
GRADE
Available



RoHS
COMPLIANT

Maximum Ratings and Electrical Characteristics at 25 °C

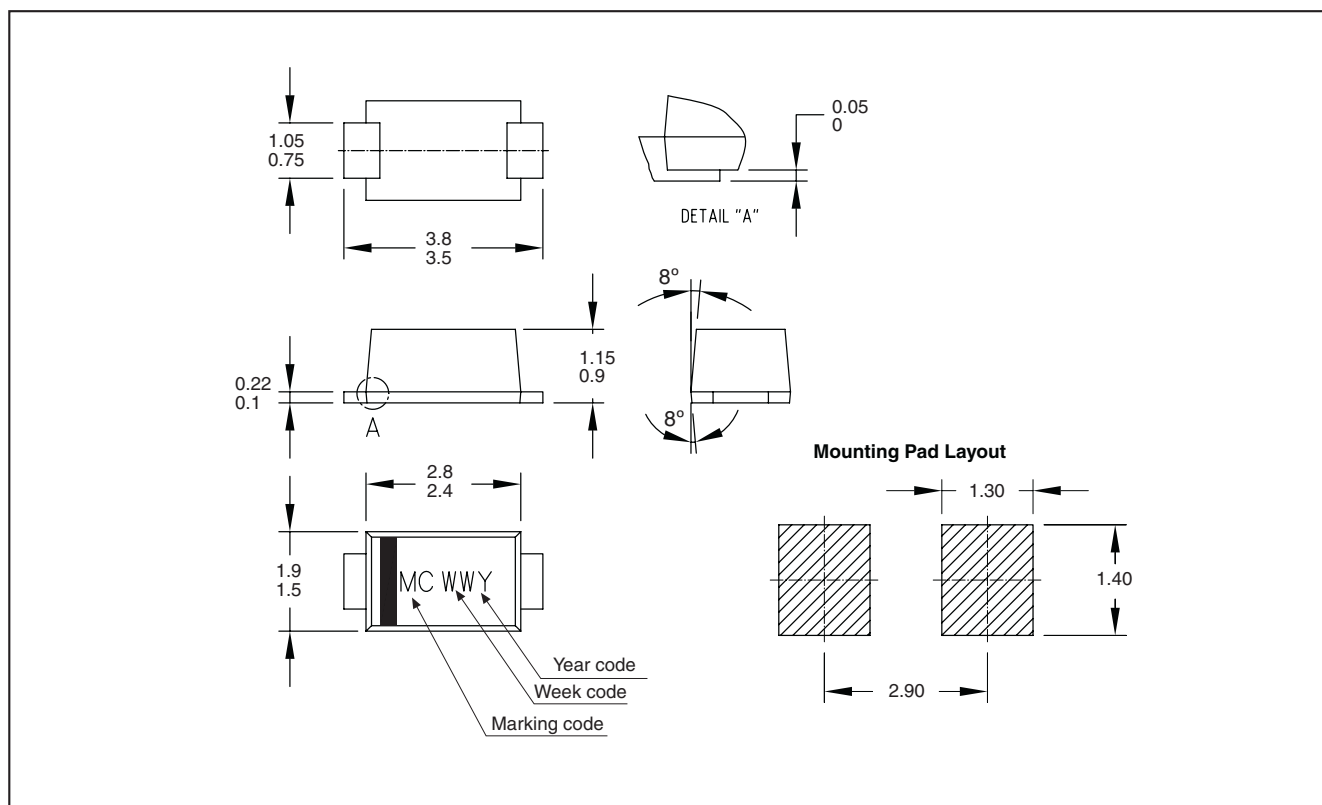
		FRS1DW	FRS1GW	FRS1JW	FRS1KW	FRS1MW
Marking Code		3J	3K	3L	3M	3N
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	200	400	600	800	1000
V_{RMS}	Maximum RMS Voltage (V)	140	280	420	560	700
V_{DC}	Maximum DC Blocking Voltage (V)	200	400	600	800	1000
$I_{F(AV)}$	Forward current at $T_L = 55^\circ\text{C}$	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 μA 50 μA				
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_{thj-l} $R_{th(j-a)}$	Typical thermal resistance (5x5 mm ² x 130 μm Copper Area)	27 $^\circ\text{C/W}$ 75 $^\circ\text{C/W}$				
$T_j - T_{stg}$	Operating Junction and Storage Temperature Range	-55 to + 150 $^\circ\text{C}$				

0.8 Amp. Surface Mounted Glass Passivated Fast Recovery Rectifier

Ordering information

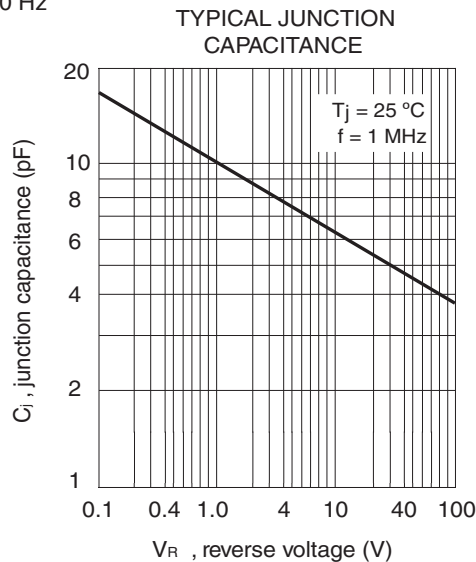
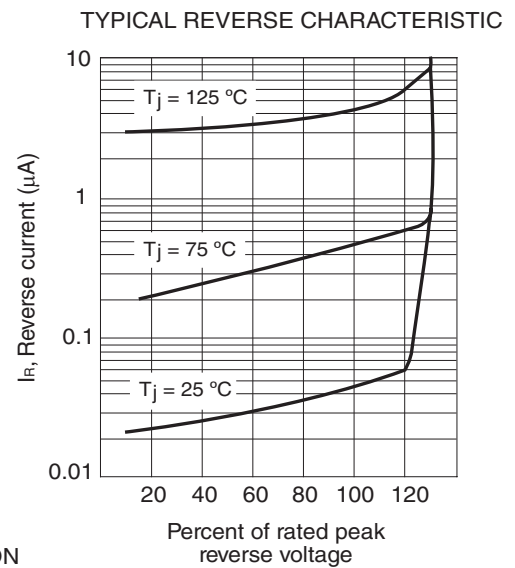
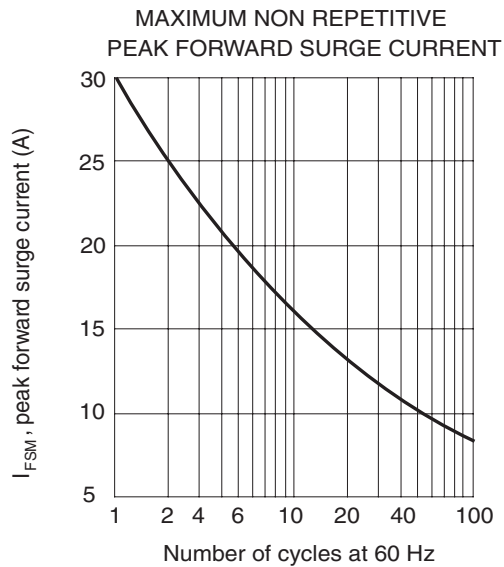
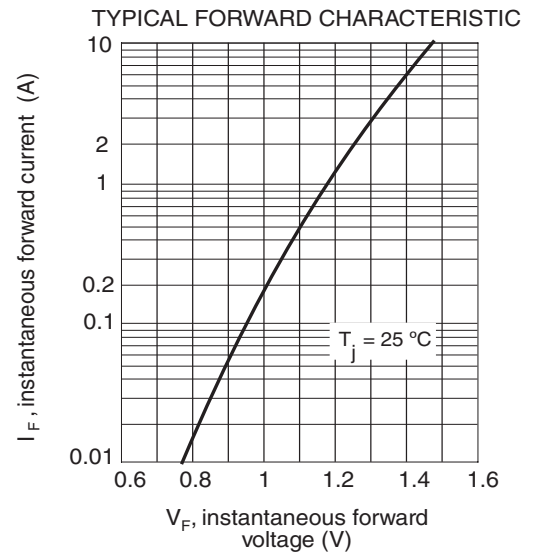
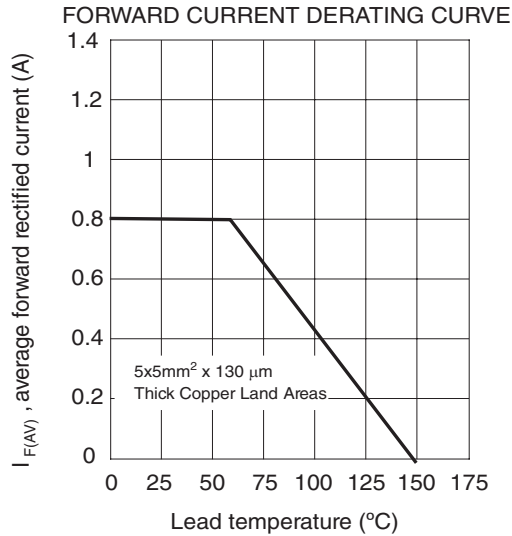
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FRS1GW TRTB	TRTB	13" diameter tape and reel	10,000	0.0165
FRS1JW HE3 TRTB	TRTB	13" diameter tape and reel	10,000	0.0165

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**

Date	Revision	Description of Changes
18-Apr-2013	0	Original Data Sheet
15-Mar-2017	1	HE3 Version included

Disclaimer

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