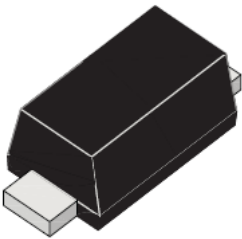





1.0 Amp. Surface Mount Glass Passivated Ultrafast Recovery Rectifier

<p style="text-align: center;">SOD123W</p> 	<p style="text-align: center;">Voltage 200 V to 1000 V</p> <p style="text-align: center;">Current 1.0 A</p>
	<p>FEATURES</p> <ul style="list-style-type: none"> • Low profile package • Ideal for automated placement • Low power losses, high efficiency • High surge current capability • Low forward voltage drop • Cavity-free glass-passivated junction • Solder dip 260 °C, 10s • AEC-Q101 qualified • 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 <div style="text-align: right;">    RoHS COMPLIANT </div>
	<p>MECHANICAL DATA</p> <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.
	<p>TYPICAL APPLICATIONS</p> <p>Used in high frequency rectification and freewheeling application in switching mode converters and inverters for consumer, computer, automotive and telecommunications.</p>

Maximun Ratings and Electrical Characteristics at 25 °C

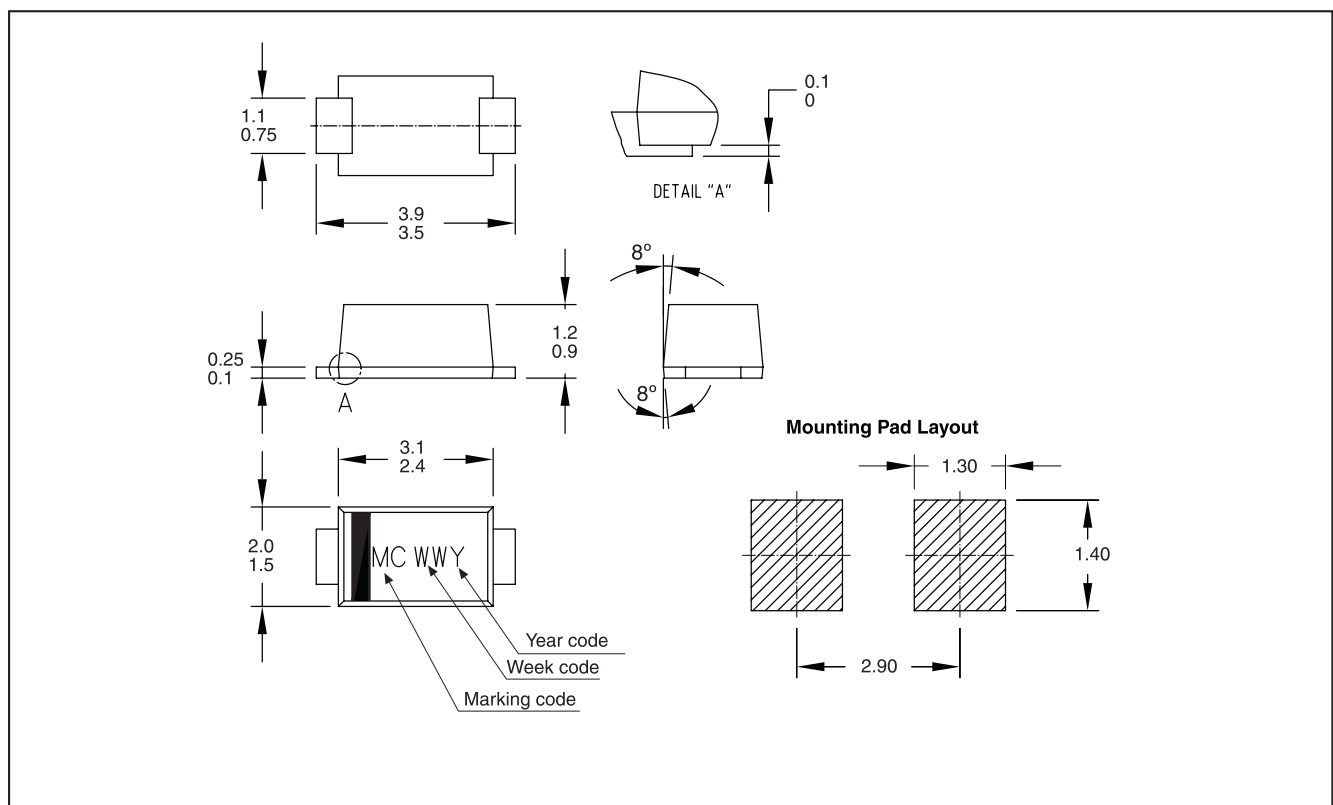
		FUF1DW	FUF1GW	FUF1JW	FUF1KW	FUF1MW
Marking Code		5I	5J	5K	5L	5M
V _{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	200	400	600	800	1000
V _{RMS}	Maximum RMS Voltage (V)	140	280	420	560	700
V _{DC}	Maximum DC Blocking Voltage (V)	200	400	600	800	1000
I _{F(AV)}	Forward current at T _L = 120 °C	1.0 A				
I _{FSM}	8,3 ms. peak forward surge current (Jedec Method)	30 A				
V _F	Maximum Instantaneous Forward Voltage at 1.0A	1.3 V		1.7 V		
I _R	Maximum DC Reverse Current T _j = 25 °C	5 μA				
	at Rated DC Blocking Voltage T _j = 100 °C	50 μA				
T _{rr}	Maximum Reverse Recovery Time (0,5/1/0,25A)	50 ns		75 ns		
C _i	Typical Junction Capacitance (1MHz; -4V)	10 pF				
R _{th(j-c)}	Typical Thermal Resistance	20 °C/W				
R _{th(j-a)}	(5x5 mm² x 130 μm Cooper Area)	75 °C/W				
T _j - T _{stg}	Operating Junction and Storage Temperature Range	- 55 to 150 °C				

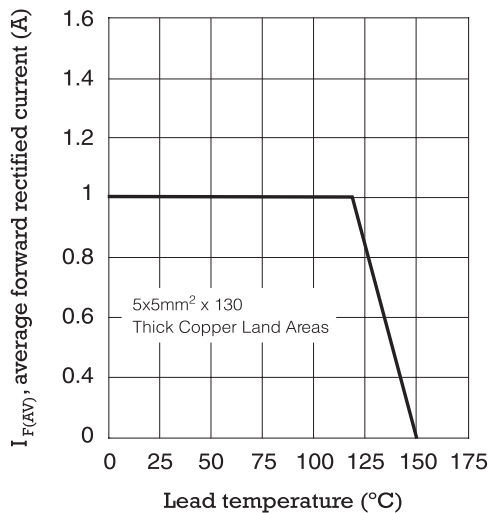
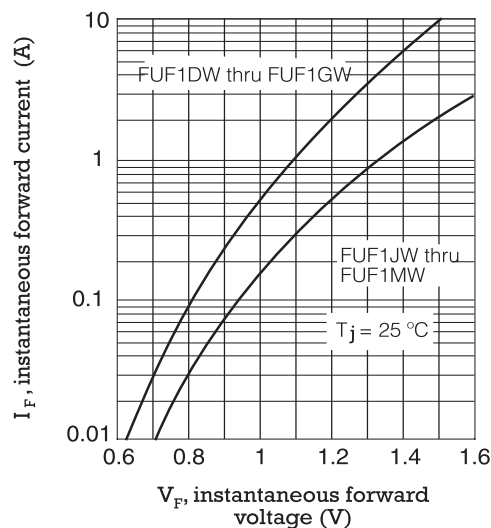
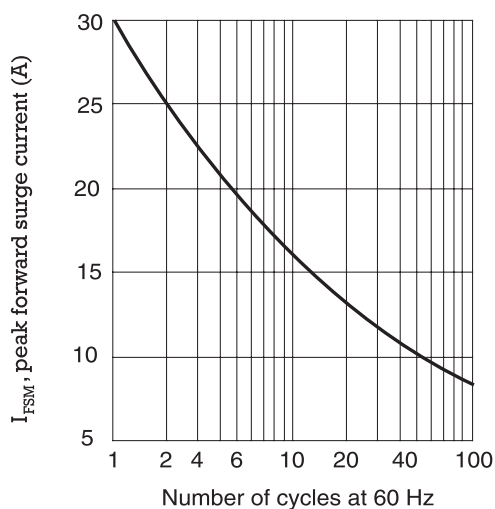
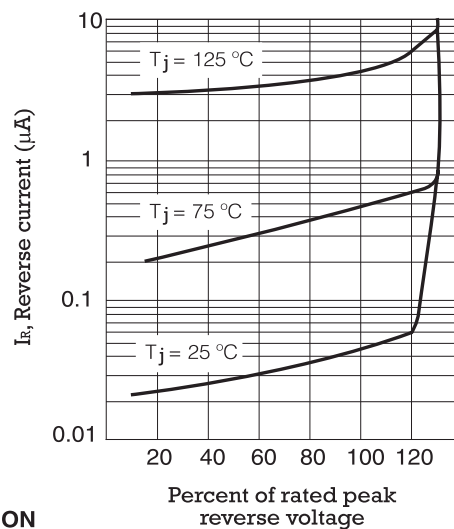
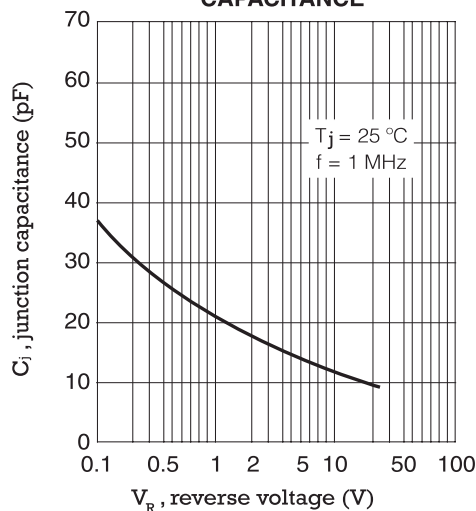
1.0 Amp. Surface Mount Glass Passivated Ultrafast Recovery Rectifier

Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FUF1JW TRTB	TRTB	13" diameter tape and reel	10,000	0.0165
FUF1JW HE3 TRTB	TRTB	13" diameter tape and reel	10,000	0.0165

Package Outline Dimensions: (mm) SOD123W



1.0 Amp. Surface Mount Glass Passivated Ultrafast Recovery Rectifier
FORWARD CURRENT DERATING CURVE

TYPICAL FORWARD CHARACTERISTIC

**MAXIMUM NON REPETITIVE
PEAK FORWARD SURGE CURRENT**

TYPICAL REVERSE CHARACTERISTIC

**TYPICAL JUNCTION
CAPACITANCE**


1.0 Amp. Surface Mount Glass Passivated Ultrafast Recovery Rectifier**Revision History**

DATE	REVISION	DESCRIPTION OF CHANGES
18-May-2014	0	Original Data Sheet
10-Jan-2020	1	Update package outline

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