

# SBM260VAL-AU

## ULTRA LOW VF SCHOTTKY BARRIER RECTIFIER

**Voltage**

**60 V**

**Current**

**2 A**

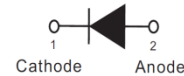
### Features

- Low forward voltage drop
- Deal for automated placement
- Low power loss, high efficiency
- High surge current capability
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard
- AEC-Q101 qualified

### Mechanical Data

- Case: SOD-123FL Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0006 ounces, 0.017 grams

SOD-123FL



### Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	60	V
Maximum Rms Voltage	V <sub>RMS</sub>	42	V
Maximum Dc Blocking Voltage	V <sub>DC</sub>	60	V
Maximum Average Forward Current	I <sub>F(AV)</sub>	2	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I <sub>FSM</sub>	50	A
Typical Junction Capacitance Measured at 1 MHZ And Applied V <sub>R</sub> = 4 V	C <sub>J</sub>	100	pF
Typical Thermal Resistance	R <sub>θJA</sub> <sup>(1)</sup>	200	°C/W
	R <sub>θJC</sub> <sup>(2)</sup>	32	
Operating Junction Temperature Range	T <sub>J</sub>	-55~150	°C
Storage Temperature Range	T <sub>STG</sub>	-55~150	°C

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## Electrical Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 0.5\text{ A}, T_J = 25^\circ\text{C}$	-	0.35	-	V
		$I_F = 2\text{ A}, T_J = 25^\circ\text{C}$	-	-	0.54	
		$I_F = 0.5\text{ A}, T_J = 125^\circ\text{C}$	-	0.28	-	
		$I_F = 2\text{ A}, T_J = 125^\circ\text{C}$	-	0.48	-	
Reverse Current	$I_R^{(3)}$	$V_R = 48\text{ V}, T_J = 25^\circ\text{C}$	-	6.6	-	$\mu\text{A}$
		$V_R = 60\text{ V}, T_J = 25^\circ\text{C}$	-	-	50	
		$V_R = 60\text{ V}, T_J = 125^\circ\text{C}$	-	3	-	mA

**NOTES:**

1. Mounted on a FR4 PCB, single-sided copper, mini pad.
2. Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area.
3. Short duration pulse test used to minimize self-heating effect.

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## TYPICAL CHARACTERISTIC CURVES

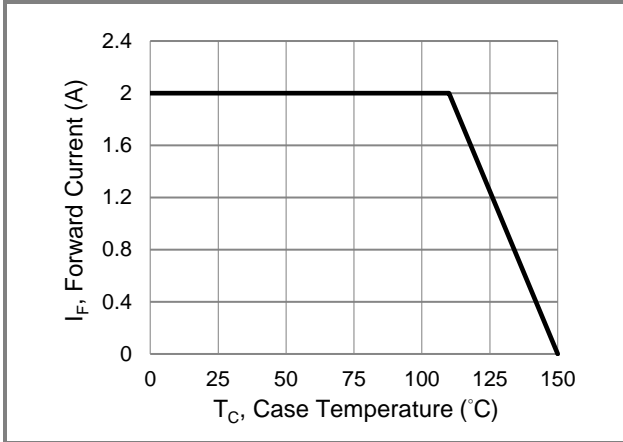


Fig.1 Forward Current Derating Curve

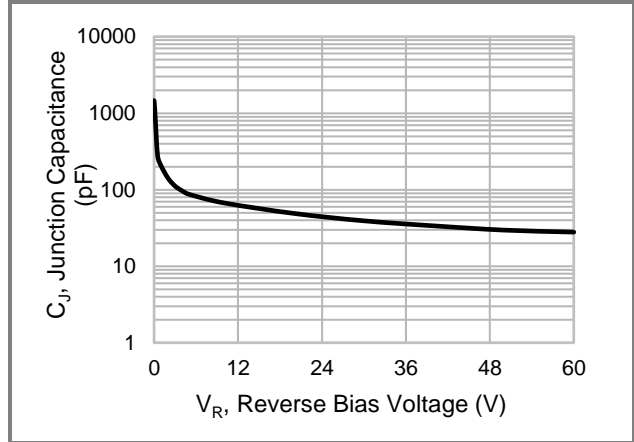


Fig.2 Typical Junction Capacitance

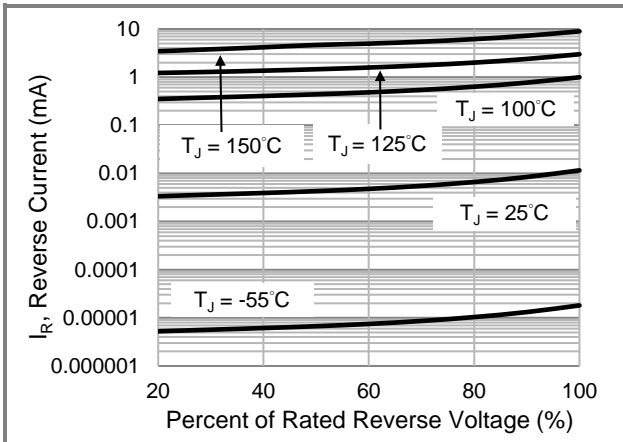


Fig.3 Typical Reverse Characteristics

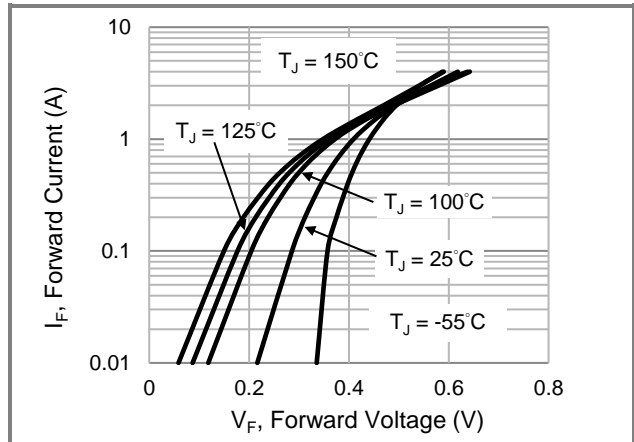


Fig.4 Typical Forward Characteristics

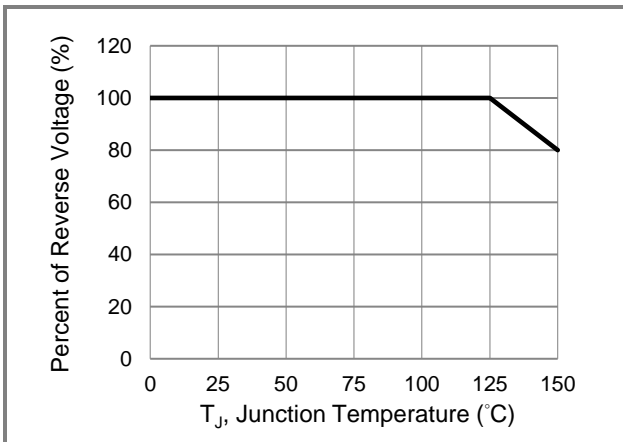


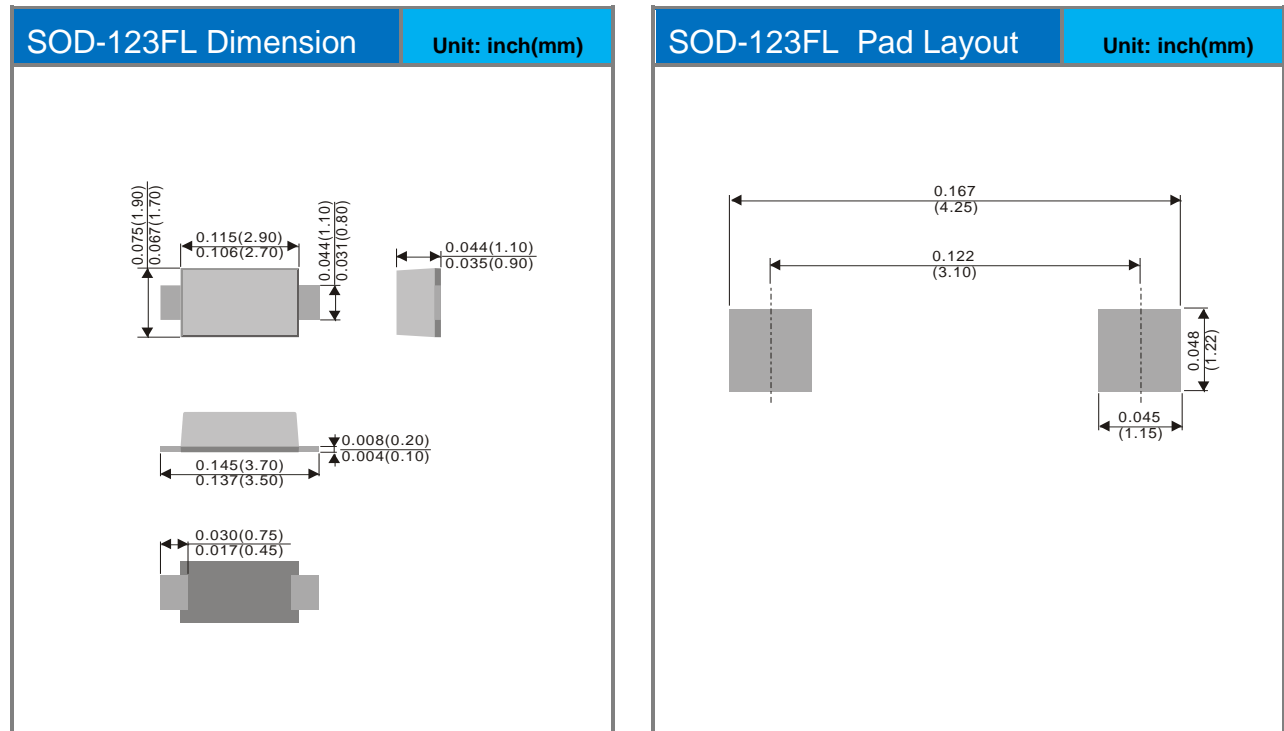
Fig.5 Operating Temperature Derating Curve

# SBM260VAL-AU

## Product and Packing Information

Part No.	Package Type	Packing Type	Marking
SBM260VAL-AU	SOD-123FL	3K / 7" Reel	3VA

## Packaging Information & Mounting Pad Layout



## **SBM260VAL-AU**

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