

# SX36-AU

## SCHOTTKY BARRIER RECTIFIER

**Voltage**

**60 V**

**Current**

**3 A**

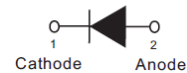
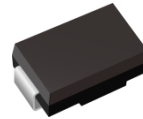
### Features

- 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: SMA Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0024 ounces, 0.068 grams

**SMA**



### 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>	3	A
Peak Forward Surge Current: 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I <sub>FSM</sub>	80	A
Typical Junction Capacitance Measured at 1 MHZ And Applied V <sub>R</sub> = 4 V	C <sub>J</sub>	120	pF
Typical Thermal Resistance	R <sub>θJA</sub> <sup>(1)</sup> R <sub>θJC</sub> <sup>(2)</sup>	150 20	°C/W
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 ( $T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 1\text{ A}, T_J = 25\text{ }^\circ\text{C}$	-	0.44	-	V
		$I_F = 3\text{ A}, T_J = 25\text{ }^\circ\text{C}$	-	-	0.75	
		$I_F = 1\text{ A}, T_J = 125\text{ }^\circ\text{C}$	-	0.37	-	
		$I_F = 3\text{ A}, T_J = 125\text{ }^\circ\text{C}$	-	0.56	-	
Reverse Current	$I_R^{(3)}$	$V_R = 48\text{ V}, T_J = 25\text{ }^\circ\text{C}$	-	7	-	$\mu\text{A}$
		$V_R = 60\text{ V}, T_J = 25\text{ }^\circ\text{C}$	-	-	100	
		$V_R = 60\text{ V}, T_J = 125\text{ }^\circ\text{C}$	-	8.5	-	mA

**NOTES:**

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

# SX36-AU

## TYPICAL CHARACTERISTIC CURVES

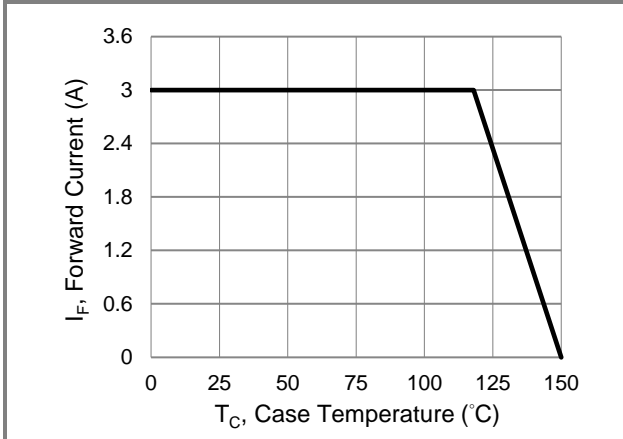


Fig.1 Forward Current Derating Curve

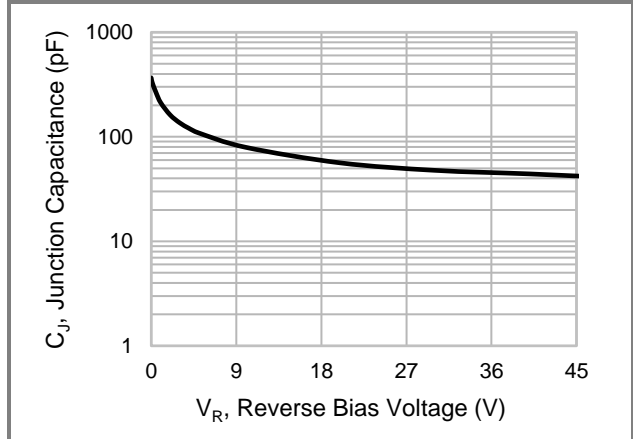


Fig.2 Typical Junction Capacitance

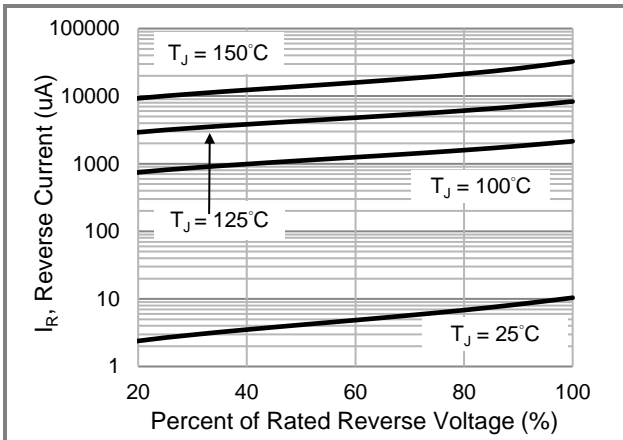


Fig.3 Typical Reverse Characteristics

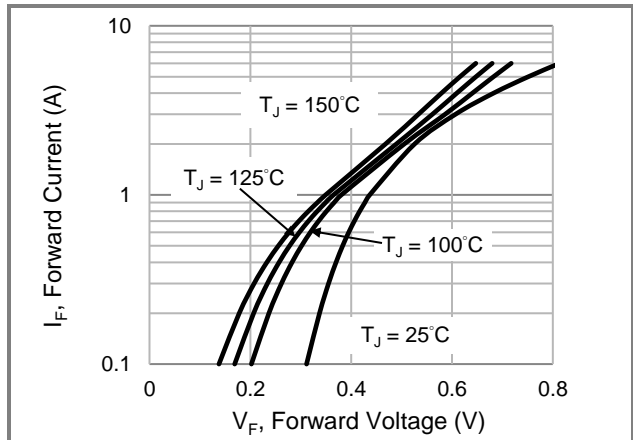


Fig.4 Typical Forward Characteristics

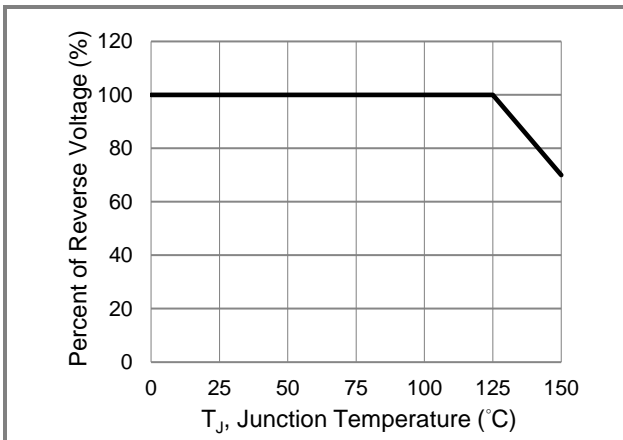


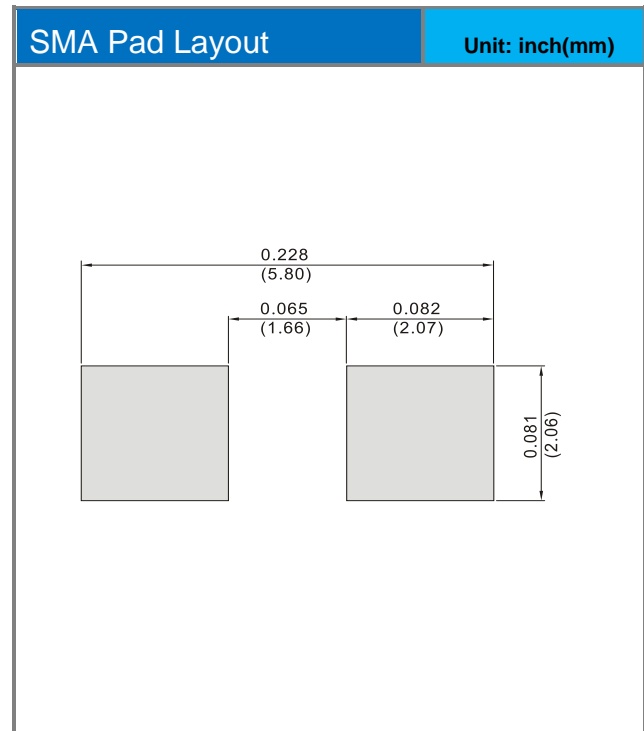
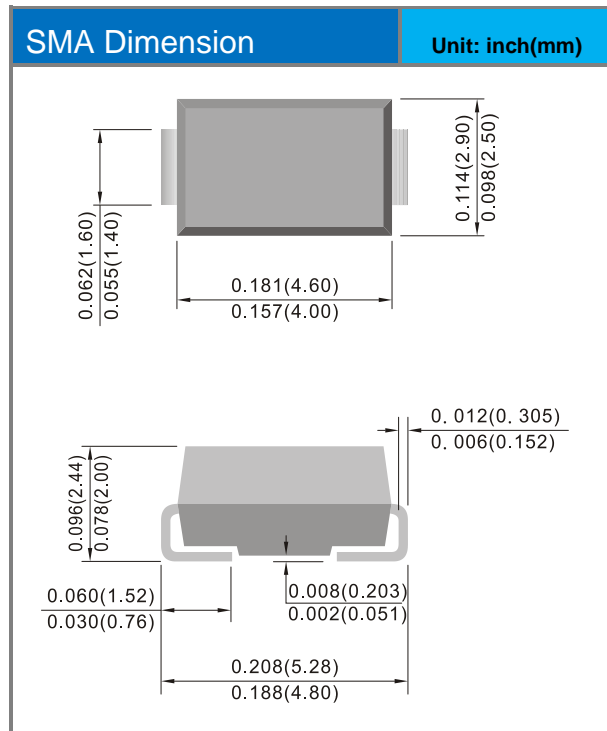
Fig.5 Operating Temperature Derating Curve

# SX36-AU

## Product and Packing Information

Part No.	Package Type	Packing Type	Marking
SX36-AU	SMA	7.5K pcs / 13" reel	SX36

## Packaging Information & Mounting Pad Layout



## SX36-AU

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