



### **SCHOTTKY BARRIER RECTIFIER**

Voltage 60 V Current 3 A

#### **Features**

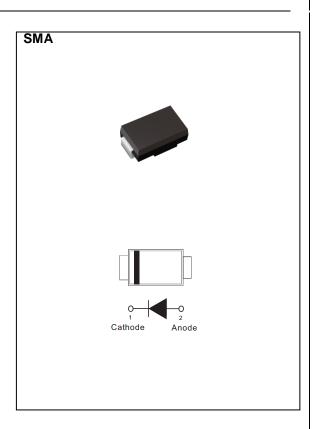
- Low forward voltage drop
- Deal for automated placement
- Low power loss, high efficiency
- High surge current capability
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard
- AEC-Q101 qualified

#### **Mechanical Data**

Case: SMA Package

• Terminals: Solderable per MIL-STD-750, Method 2026

• Approx. Weight: 0.0024 ounces, 0.068 grams



### **Maximum Ratings and Thermal Characteristics** ( $T_A = 25$ $^{\circ}$ C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	60	V
Maximum Rms Voltage	$V_{RMS}$	42	V
Maximum Dc Blocking Voltage	$V_{DC}$	60	V
Maximum Average Forward Current	I <sub>F(AV)</sub>	3	Α
Peak Forward Surge Current: 8.3 ms Single Half Sine- Wave Superimposed On Rated Load	I <sub>FSM</sub>	80	А
Typical Junction Capacitance  Measured at 1 MHZ And Applied $V_R = 4 \text{ V}$	CJ	120	pF
Typical Thermal Resistance	$R_{\theta JA}^{(1)}$ $R_{\theta JC}^{(2)}$	150 20	°C/W
Operating Junction Temperature Range	TJ	-55~150	°C
Storage Temperature Range	T <sub>STG</sub>	-55~150	°C





# **Electrical Characteristics** (T<sub>A</sub> = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 1 A, T <sub>J</sub> = 25 °C	-	0.44	-	V
		$I_F = 3 \text{ A}, T_J = 25 ^{\circ}\text{C}$	-	-	0.75	
		I <sub>F</sub> = 1 A, T <sub>J</sub> = 125 °C	-	0.37	-	
		I <sub>F</sub> = 3 A, T <sub>J</sub> = 125 °C	-	0.56	-	
Reverse Current	I <sub>R</sub> <sup>(3)</sup>	$V_R = 48 \text{ V}, T_J = 25 ^{\circ}\text{C}$	-	7	-	uA
		$V_R = 60 \text{ V}, T_J = 25 ^{\circ}\text{C}$	-	-	100	
		V <sub>R</sub> = 60 V, T <sub>J</sub> = 125 °C	-	8.5	-	mA

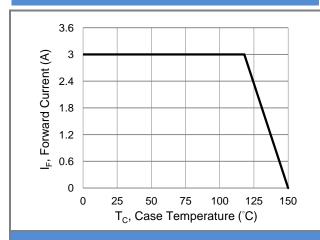
#### NOTES:

- 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

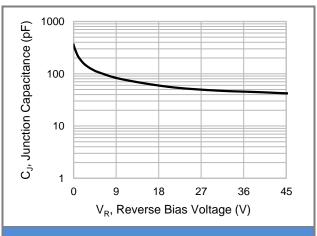




#### **TYPICAL CHARACTERISTIC CURVES**



**Fig.1 Forward Current Derating Curve** 



**Fig.2 Typical Junction Capacitance** 

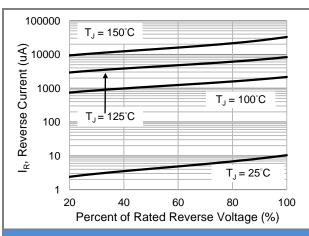
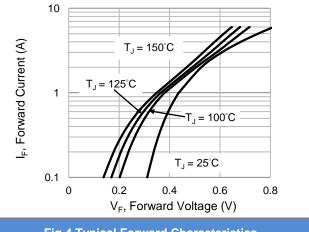


Fig.3 Typical Reverse Characteristics



**Fig.4 Typical Forward Characteristics** 

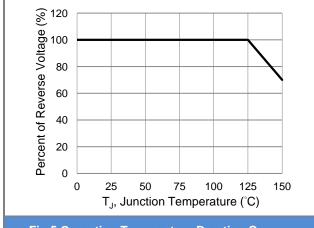


Fig.5 Operating Temperature Derating Curve

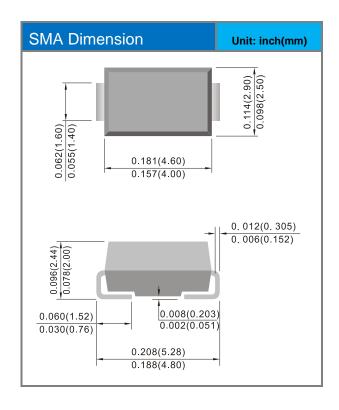


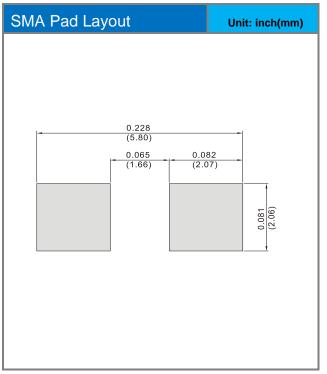


### **Part No Packing Code Version**

Part No Packing Code	Package Type	Packing Type	Marking	Version
SX36-AU_R2_000A1	SMA	7.5K pcs / 13" reel	SX36	Halogen free

### **Packaging Information & Mounting Pad Layout**









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