



MINI SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Voltage

100 V

Current

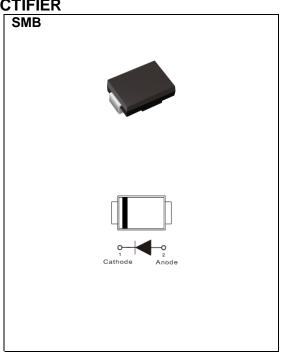
3 A

Features

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

Mechanical Data

- Case: JEDEC DO-214AA molded plastic
- Polarity: Color Band denotes cathode end
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0032 ounces, 0.092 grams



Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V	
Maximum RMS Voltage	V_{RMS}	70	V	
Maximum DC Blocking Voltage	V_{DC}	100	V	
Maximum Average Forward Rectified Current	I _{F(AV)}	3	Α	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load per diode	I _{FSM}	80	А	
Typical Junction Capacitance Measured at 1 MHz And Applied $V_R = 4V$	CJ	120	pF	
	R _{θJA} ⁽¹⁾	75		
Typical Thermal Resistance per diode	R _{eJC} (2)	18	°C/W	
	R _{eJL} (1)	20		
Operating Junction Temperature Range	T_J	-65 to +175	°C	
Storage Temperature Range	T _{STG}	-65 to +175	°C	





Electrical Characteristics (T_A = 25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Instantaneous forward voltage	V _F	$I_F = 1 \text{ A}, T_J = 25 ^{\circ}\text{C}$	-	0.63	ı	V
		$I_F = 3 \text{ A}, T_J = 25 ^{\circ}\text{C}$	-	•	0.8	
		$I_F = 1 \text{ A}, T_J = 125 ^{\circ}\text{C}$	-	0.51	-	
		$I_F = 3 \text{ A}, T_J = 125 ^{\circ}\text{C}$	-	0.62	1	
Reverse current	I _R ⁽³⁾	$V_R = 80 \text{ V}, T_J = 25 ^{\circ}\text{C}$	-	0.14	-	- uA
		V _R = 100 V, T _J = 25 °C	-	-	50	
		V _R = 100 V, T _J = 100 °C	-	-	20	mA

NOTES:

- 1. Mounted on a PCB, single-sided copper, with 8 mm² (0.013mm thick) copper pad area
- 2. Mounted on a FR4 PCB, single-sided copper, with 100 cm² copper pad area
- 3. Short duration pulse test used to minimize self-heating effect





TYPICAL CHARACTERISTIC CURVES

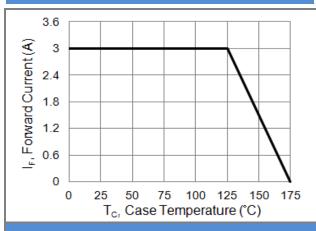


Fig.1 Forward Current Derating Curve

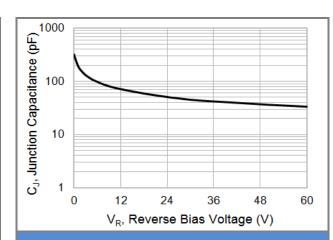


Fig.2 Typical Junction Capacitance

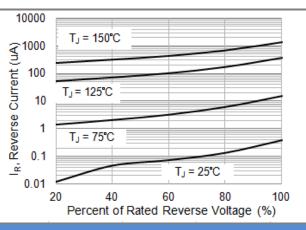


Fig.3 Typical Reverse Characteristics

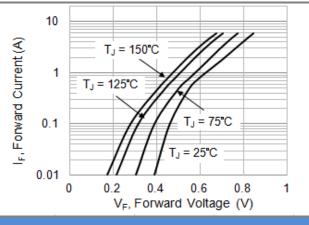


Fig.4 Typical Forward Characteristics

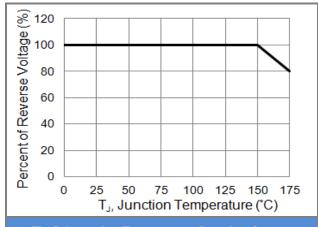


Fig.5 Operating Temperature Derating Curve

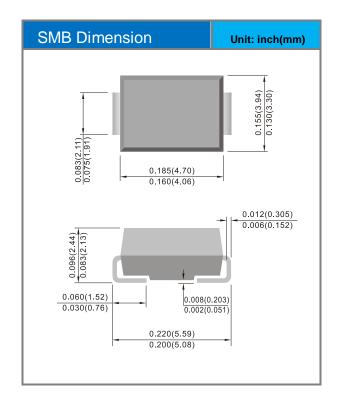


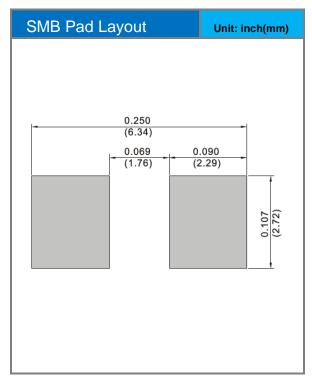


Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
BR310-AU_R2_000A1	SMB	3000 pcs / 13" reel	BR310	Halogen free

Packaging Information & Mounting Pad Layout









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