



SB560LPC-AU

Surface Mount Schottky Barrier Rectifier

Voltage

60 V

Current

5 A

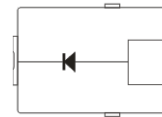
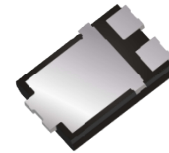
Features

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

Mechanical Data

- Case : TO-277C package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0039 ounces, 0.11 grams

TO-277C



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

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Recurrent 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 Rectified Current	I _{F(AV)}	5	A
Peak Forward Surge Current : 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	120	A
Typical Thermal Resistance (Note 1)	R _{θJA}	65	°C/W
(Note 2)	R _{θJL}	10	
Operating Junction Temperature Range	T _J	-55~150	°C
Storage Temperature Range	T _{STG}	-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	$I_F = 3\text{ A}, T_J = 25\text{ }^\circ\text{C}$	-	0.51	-	V
		$I_F = 5\text{ A}, T_J = 25\text{ }^\circ\text{C}$	-	0.61	0.67	
		$I_F = 3\text{ A}, T_J = 125\text{ }^\circ\text{C}$	-	0.48	-	
		$I_F = 5\text{ A}, T_J = 125\text{ }^\circ\text{C}$	-	0.57	-	
Reverse Current ^(Note 3)	I_R	$V_R = 48\text{ V}, T_J = 25\text{ }^\circ\text{C}$	-	12	-	uA
		$V_R = 60\text{ V}, T_J = 25\text{ }^\circ\text{C}$	-	-	150	
		$V_R = 60\text{ V}, T_J = 125\text{ }^\circ\text{C}$	-	8	-	mA

NOTES :

1. Mounted on a FR4 PCB, single-sided copper, standard footprint
2. Mounted on 100cm² copper pad area
3. Short duration pulse test used to minimize self-heating effect



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TYPICAL CHARACTERISTIC CURVES

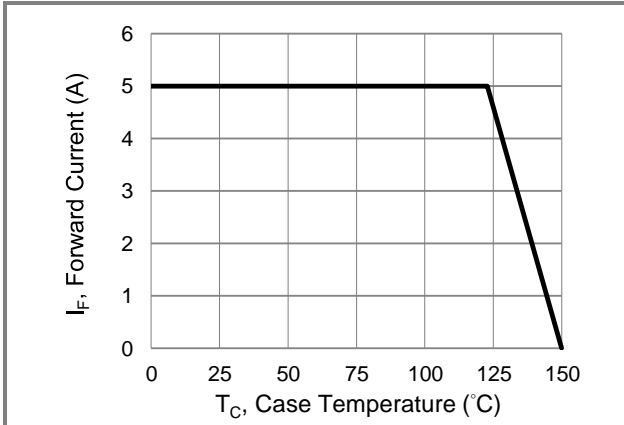


Fig.1 Forward Current Derating Curve

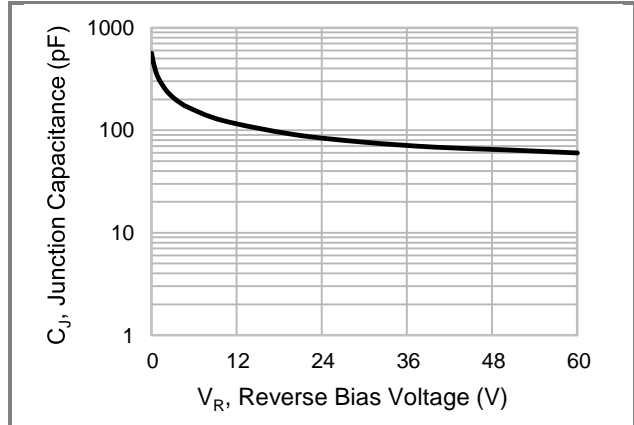


Fig.2 Typical Junction Capacitance

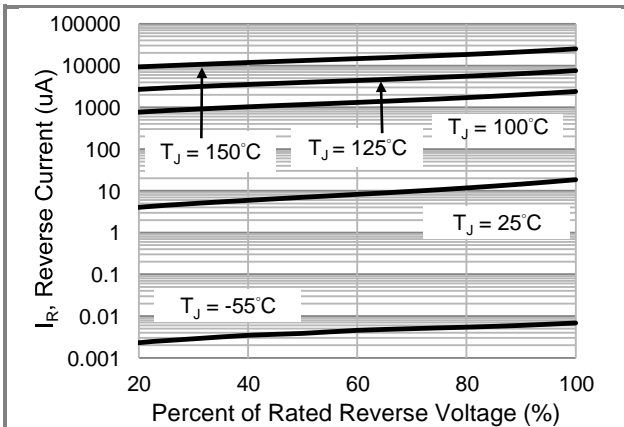


Fig.3 Typical Reverse Characteristics

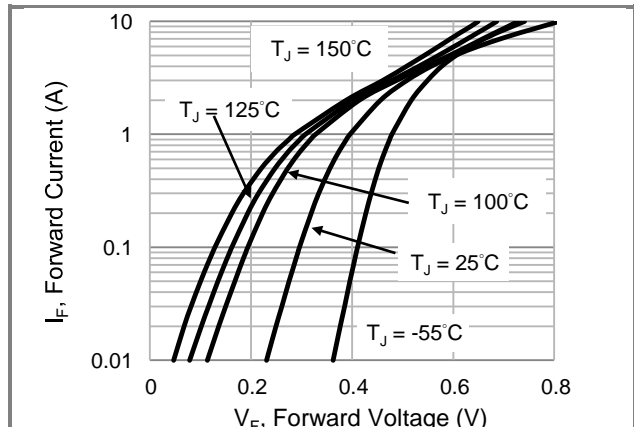


Fig.4 Typical Forward Characteristics

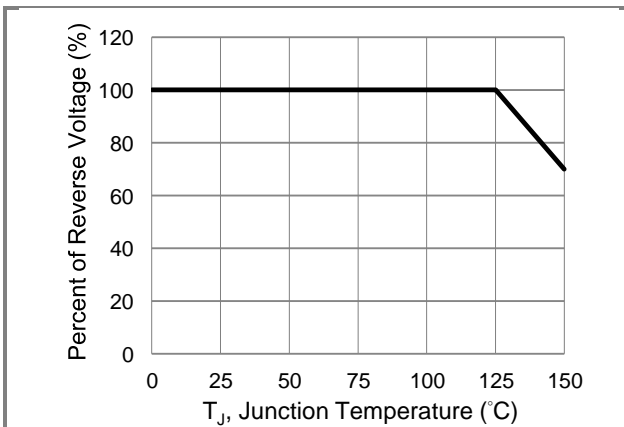


Fig.5 Operating Temperature Derating Curve

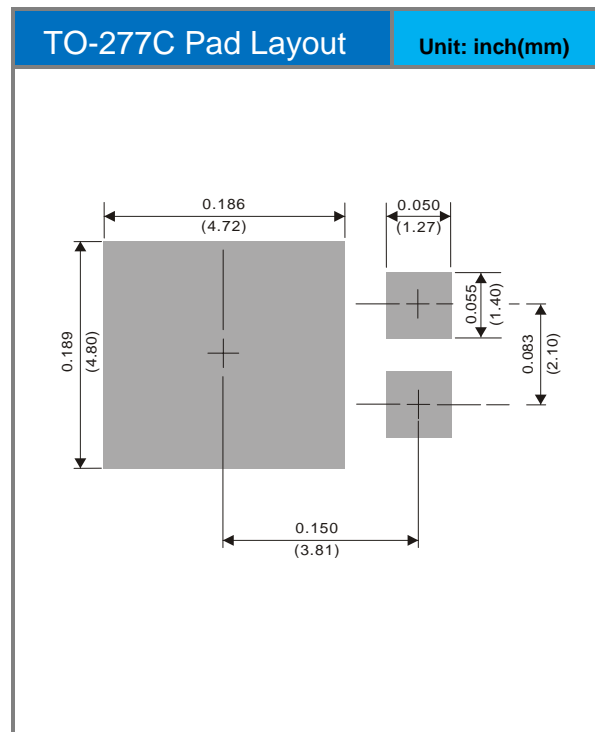
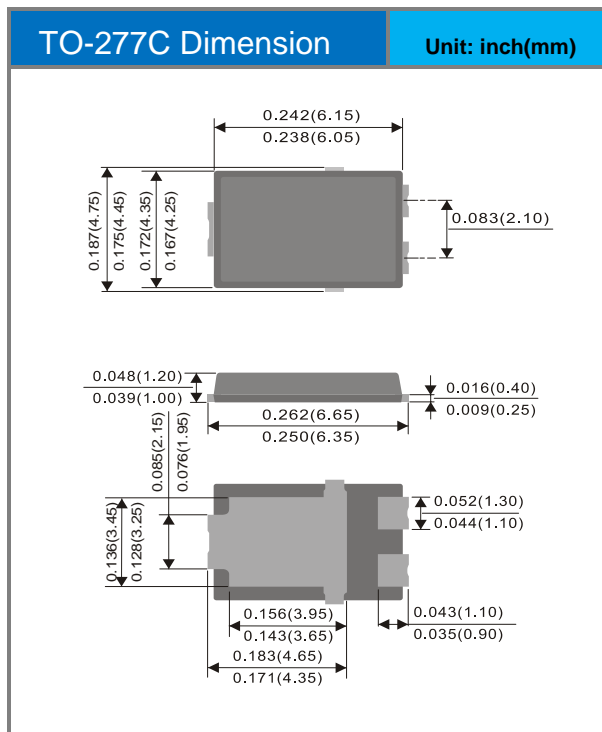


SB560LPC-AU

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
SB560LPC-AU_R2_000A1	TO-277C	5K / 13" reel	SB560LPC	Halogen free

Packaging Information & Mounting Pad Layout





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