

BAT41AS

Surface Mount Schottky Diodes

Voltage

100 V

Current

200 mA

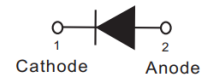
Features

- Extremely high switching speed
- Surface mount package ideally suited for automatic insertion
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : SOD-123 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0104 grams

SOD-123



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

PARAMETER	SYMBOL	LIMIT	UNIT
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)}	0.2	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	1	A
Typical Thermal Resistance ^(Note 1)	R _{θJA}	510	°C/W
Operating Junction Temperature Range	T _J	-55~150	°C
Storage Temperature Range	T _{STG}	-55~150	°C

BAT41AS

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

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Breakdown Voltage	V_{BR}	$I_R = 50 \mu\text{A}, T_J = 25^\circ\text{C}$	100	-	-	V
Forward Voltage	V_F	$I_F = 1 \text{ mA}, T_J = 25^\circ\text{C}$	-	-	0.45	V
		$I_F = 200 \text{ mA}, T_J = 25^\circ\text{C}$	-	-	1	
Reverse Current ^(Note 2)	I_R	$V_R = 50 \text{ V}, T_J = 25^\circ\text{C}$	-	-	0.1	μA
		$V_R = 50 \text{ V}, T_J = 100^\circ\text{C}$	-	-	20	
Typical Junction Capacitance	C_J	1Vdc Bias $f = 1 \text{ MHz}$	-	3	10	pF

NOTES :

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

BAT41AS

TYPICAL CHARACTERISTIC CURVES

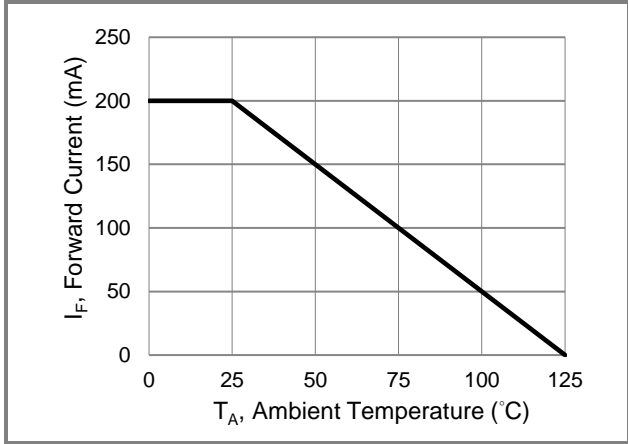


Fig.1 Forward Current Derating Curve

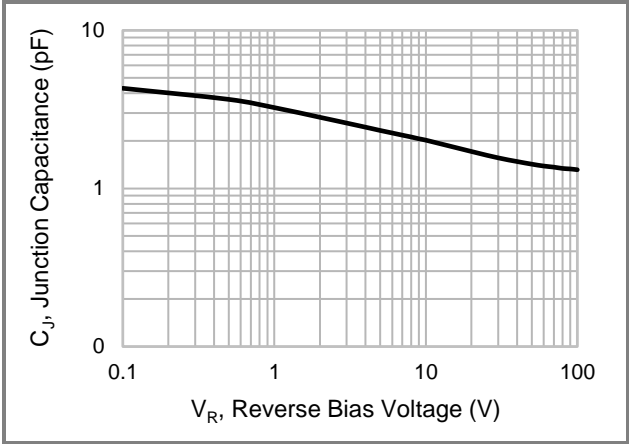


Fig.2 Typical Junction Capacitance

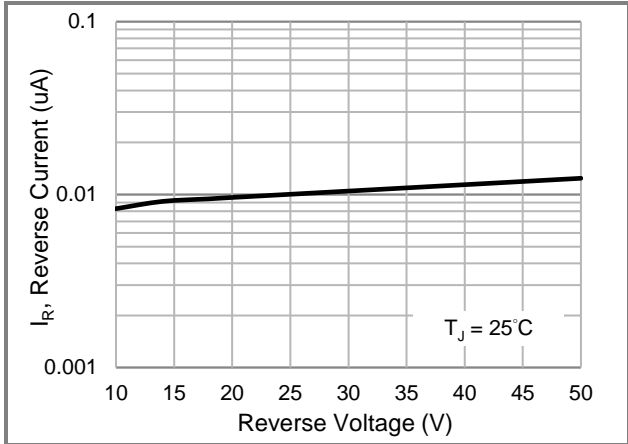


Fig.3 Typical Reverse Characteristics

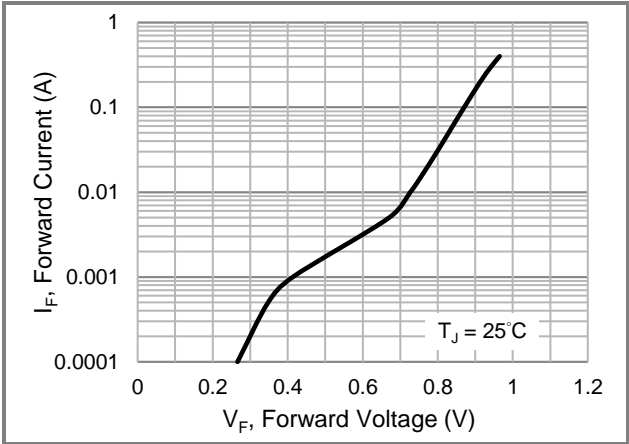


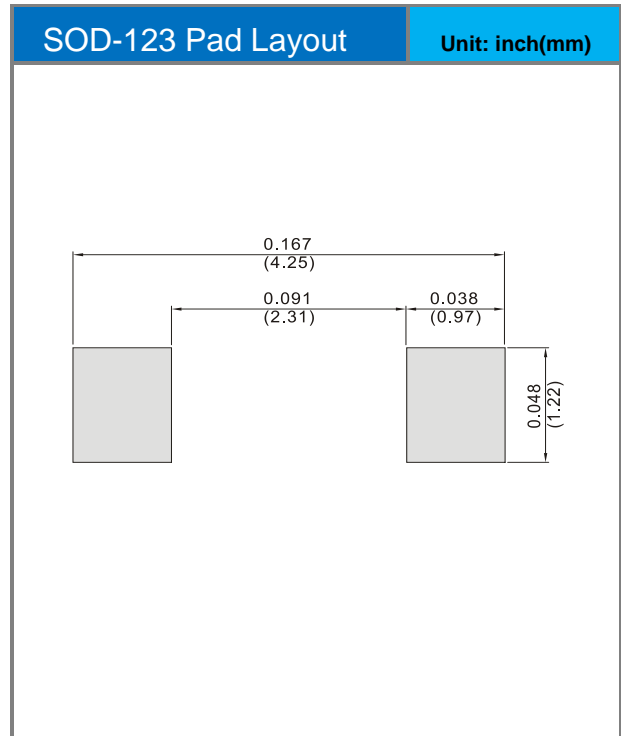
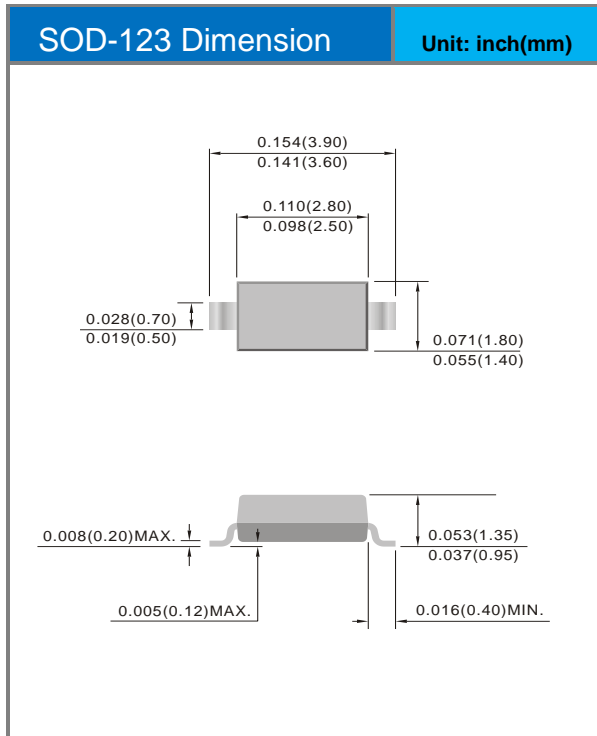
Fig.4 Typical Forward Characteristics

BAT41AS

Product and Packing Information

Part No.	Package Type	Packing Type	Marking
BAT41AS	SOD-123	3K pcs / 7" reel	AAA

Packaging Information & Mounting Pad Layout



BAT41AS

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document follow PCN procedure. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.