



### SURFACE MOUNT SCHOTTKY DIODES

Voltage 30 V Current 0.2 A

#### **Features**

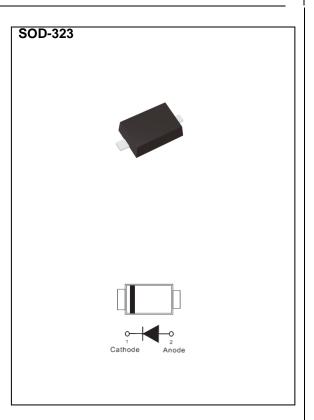
- Low turn-on voltage
- Fast switching
- PN junction guard ring for transient and ESD protection
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard
- AEC-Q101 qualified

#### **Mechanical Data**

• Case: SOD-323 Package

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

• Approx. Weight: 0.0001 ounces, 0.004 grams



### **Maximum Ratings and Thermal Characteristics** (T<sub>A</sub> = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	30	V
Maximum Rms Voltage	$V_{RMS}$	21	V
Maximum Dc Blocking Voltage	$V_{DC}$	30	V
Maximum Average Forward Current	I <sub>F(AV)</sub>	0.2	Α
Peak Forward Surge Current : 1 s Single Half Sine- Wave Superimposed On Rated Load	I <sub>FSM</sub>	1	А
Typical Junction Capacitance  Measured at 1 MHZ And Applied $V_R = 1 \text{ V}$	C <sub>J</sub>	10	pF
Typical Thermal Resistance	R <sub>θJA</sub> <sup>(1)</sup>	650	°C/W
Operating Junction Temperature Range	TJ	-55~125	°C
Storage Temperature Range	T <sub>STG</sub>	-55~125	°C

October 14,2019-REV.15 Page 1





# **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>	$I_F = 1 \text{ mA}, T_J = 25 ^{\circ}\text{C}$	-	-	0.32	V
		$I_F = 100 \text{ mA}, T_J = 25 ^{\circ}\text{C}$	-	-	0.60	
		I <sub>F</sub> = 1 mA, T <sub>J</sub> = 125 °C	-	0.14	-	
		I <sub>F</sub> = 100 mA, T <sub>J</sub> = 125 °C	-	0.47	-	
Reverse Current	I <sub>R</sub> <sup>(2)</sup>	$V_R = 24 \text{ V}, T_J = 25 ^{\circ}\text{C}$	-	0.1	-	uA
		$V_R = 30 \text{ V}, T_J = 25 ^{\circ}\text{C}$	-	-	2	
		$V_R = 30 \text{ V}, T_J = 125 ^{\circ}\text{C}$	-	90	-	

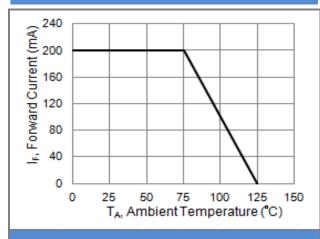
#### NOTES:

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

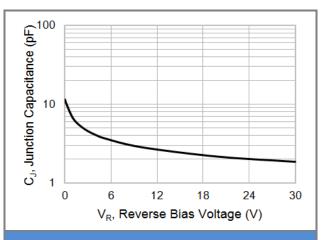




#### **TYPICAL CHARACTERISTIC CURVES**



**Fig.1 Forward Current Derating Curve** 



**Fig.2 Typical Junction Capacitance** 

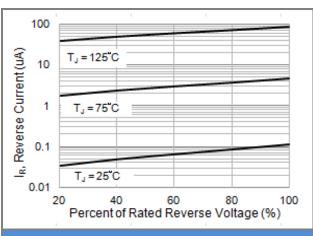


Fig.3 Typical Reverse Characteristics

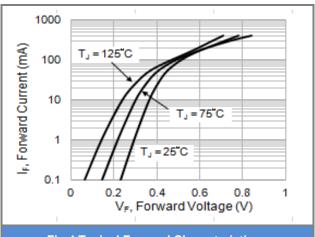


Fig.4 Typical Forward Characteristics

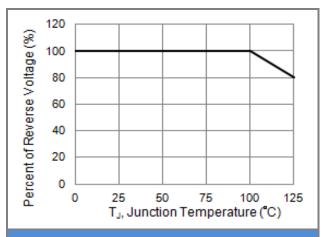


Fig.5 Operating Temperature Derating Curve

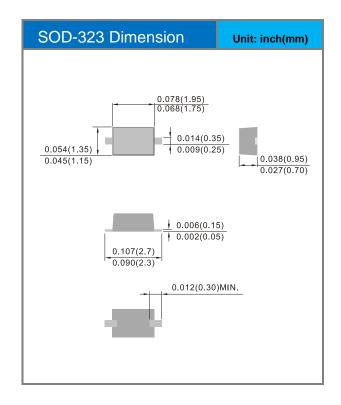


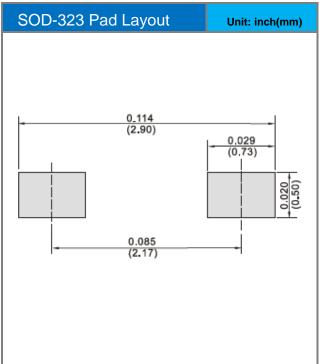


### **Part No Packing Code Version**

Part No Packing Code	Package Type	Packing Type	Marking	Version
BAT54WS-AU_R1_000A1	SOD-323	5K / 7" Reel	L4	Halogen free

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





October 14,2019-REV.15 Page 4





#### 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 anytime without notification. 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 relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, 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.

单击下面可查看定价,库存,交付和生命周期等信息

>>Panjit(强茂)