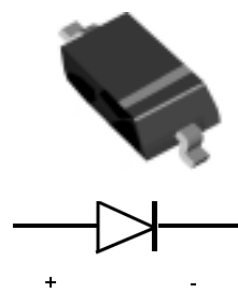


Schottky Barrier Diode

Features

- Extremely Fast Switching Speed
- Low Forward Voltage
- **Pb-Free package is available**
RoHS product for packing code suffix "G"
Halogen free product for packing code suffix "H"
- **Moisture Sensitivity Level 1**
- **Polarity:** Color band denotes cathode end
- Marking : L9 \ S1

SOD-323



Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Average Rectified Forward Current	I_O	100	mA
Forward Continuous Current (Note 1)	I_F	200	mA
Repetitive Peak Forward Current (Note 1)	I_{FRM}	300	mA
Forward Surge Current (Note 1) @ $t < 1.0\text{s}$	I_{FSM}	600	mA
Power Dissipation (Note 1)	P_d	200	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +125	$^\circ\text{C}$

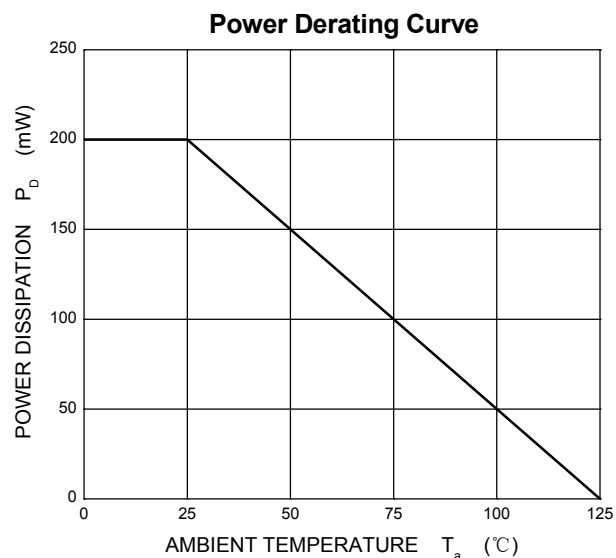
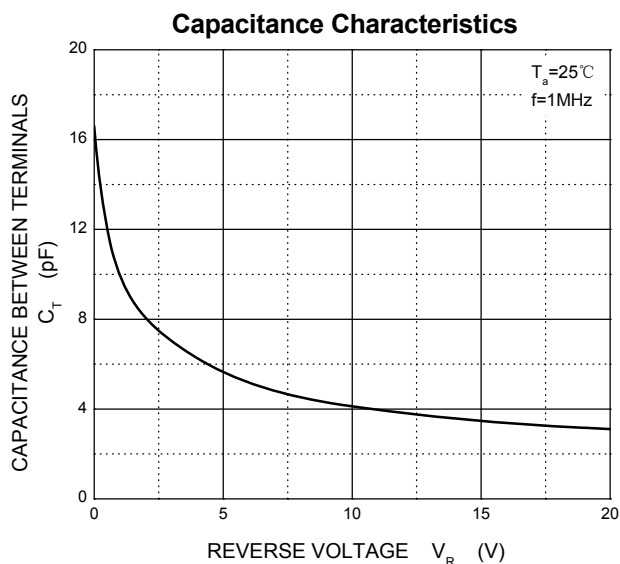
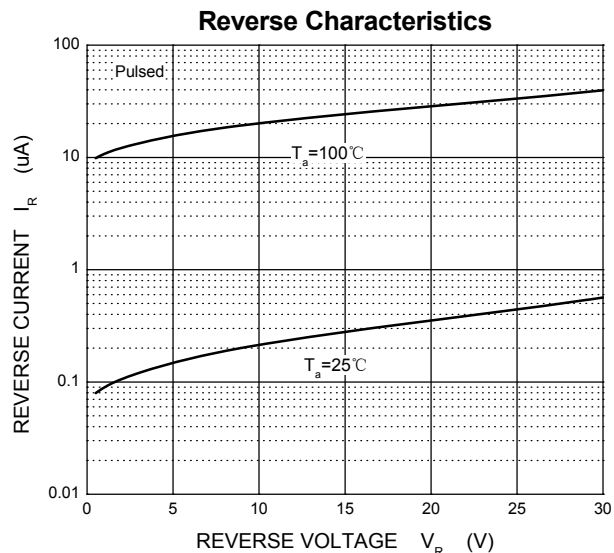
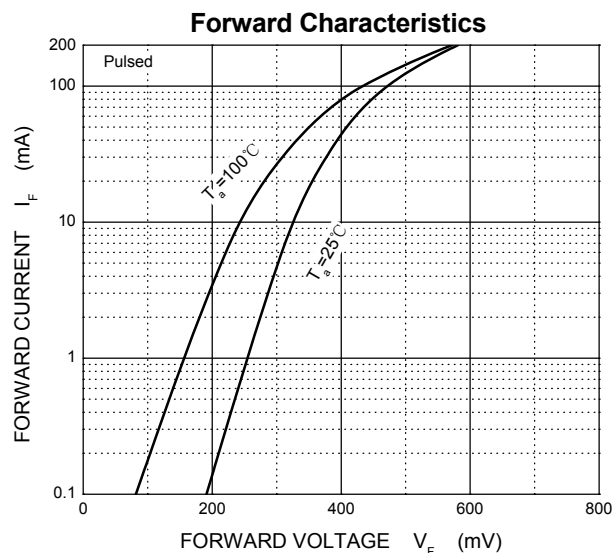
Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	30	—	—	V	$I_{RS} = 100\mu\text{A}$
Forward Voltage (Note 2)	V_{FM}	—	—	240 320 400 500 1000	mV	$I_F = 0.1\text{mA}$ $I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 30\text{mA}$ $I_F = 100\text{mA}$
Reverse Leakage Current (Note 2)	I_{RM}	—	—	2.0	μA	$V_R = 25\text{V}$
Junction Capacitance	C_j	—	—	10	pF	$V_R = 1.0\text{V}, f = 1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	—	—	5.0	ns	$I_F = 10\text{mA}$ through $I_R = 10\text{mA}$ to $I_R = 1.0\text{mA}, R_L = 100\Omega$

Notes: 1. Valid provided that leads are kept at ambient temperature.
2. $t < 300\mu\text{s}$, duty cycle $< 2\%$.



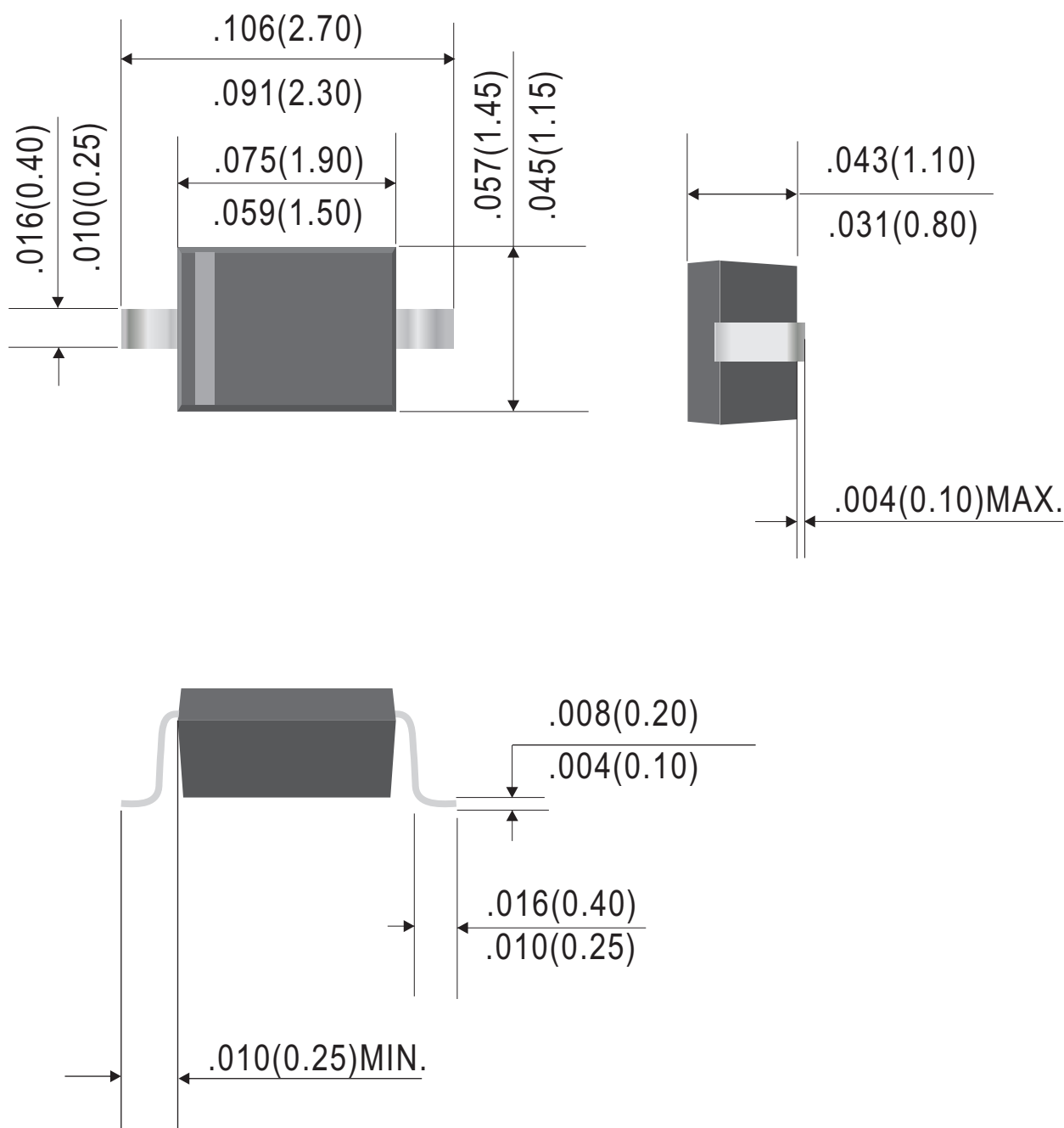
Typical Characteristics





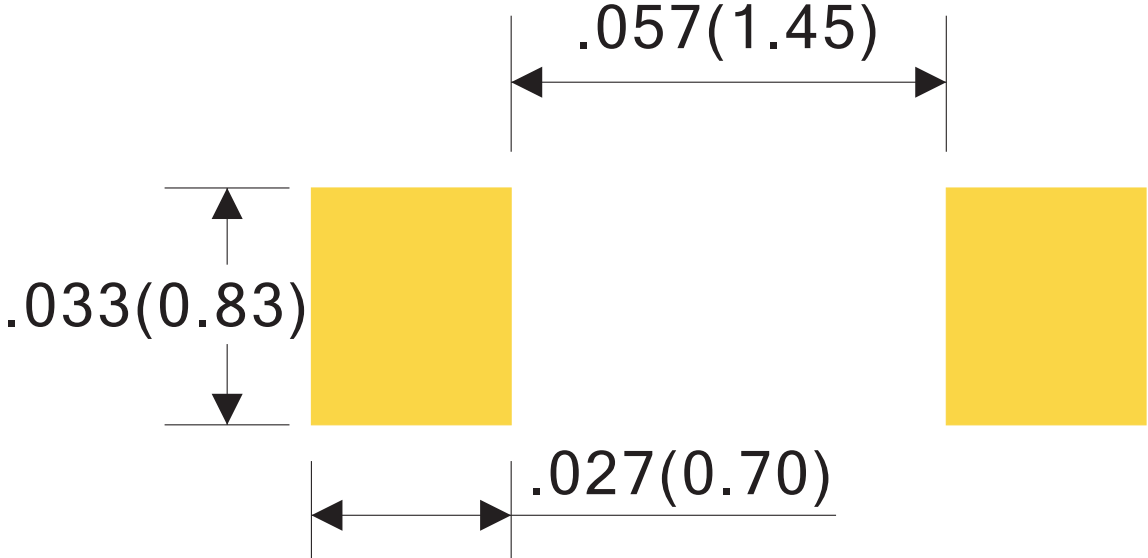
Outline Drawing

SOD-323



Dimensions in inches and (millimeters)

Rev.C

Suggested Soldering Pad Layout	SOD-323
 Dimensions in inches and (millimeters)	
RevA	

Ordering Information:

Device PN	Packing
BAT54WS -T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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