BAT48WS

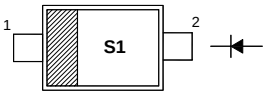
Schottky Barrier Diode

Features

- Low forward voltage
- Small plastic SMD SOD-323 package

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "**S1**"
Simplified outline SOD-323 and symbol

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Forward Current	I_F	350	mA
Peak Forward Surge Current (t_p = 10 ms)	I_{FSM}	2	A
Thermal Resistance from Junction Ambient	R_{thJA}	550	°C/W
Maximum Operating Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 65 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 25 µA	$V_{(BR)R}$	40	-	V
Forward Voltage at I_F = 0.1 mA at I_F = 1 mA at I_F = 10 mA at I_F = 50 mA at I_F = 200 mA at I_F = 500 mA	V_F	 - - - - - -	 0.25 0.3 0.4 0.5 0.75 0.9	V
Reverse Current at V_R = 1.5 V at V_R = 10 V at V_R = 20 V at V_R = 40 V	I_R	 - - - -	 1 2 5 25	µA

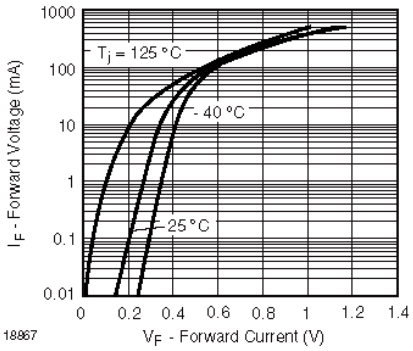


Figure 1. Typical Forward Voltage Forward Current at Various Temperatures

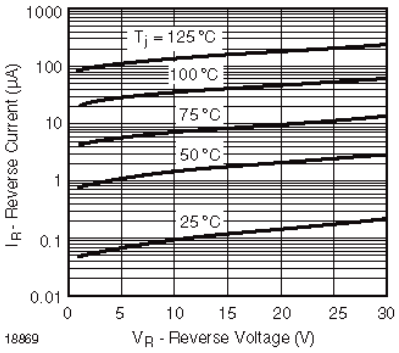


Figure 3. Typical Variation of Reverse Current at Various Temperatures

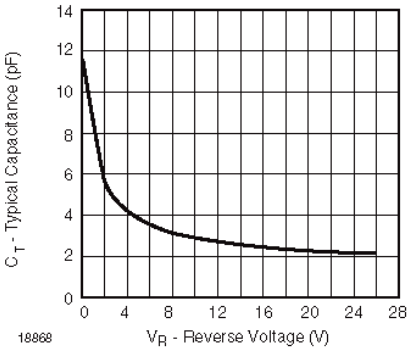
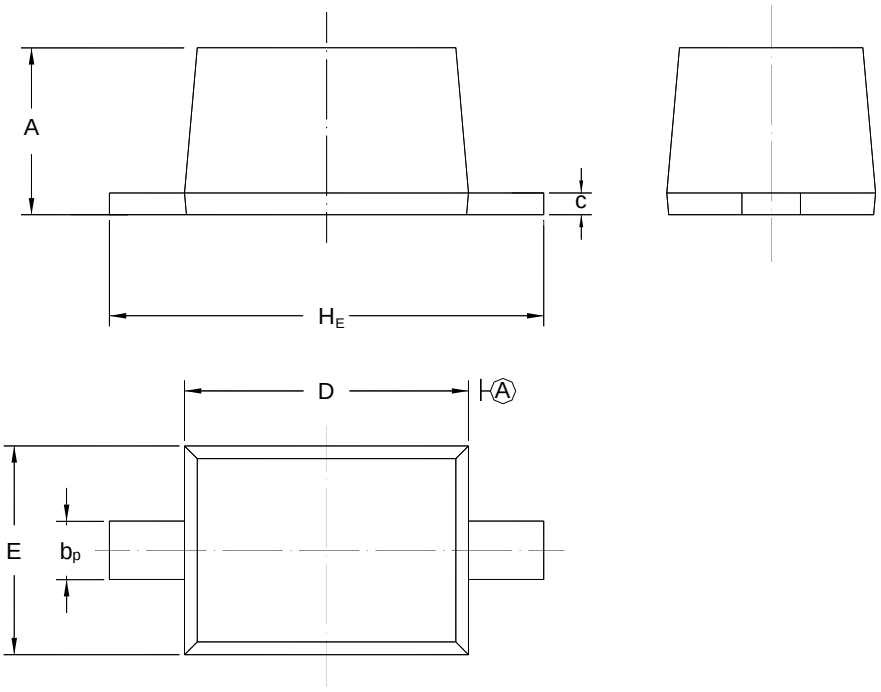


Figure 2. Typical Capacitance °C vs. Reverse Applied Voltage V_R

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-323**



UNIT	A	b_p	C	D	E	H_E
mm	1.10 0.80	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30