

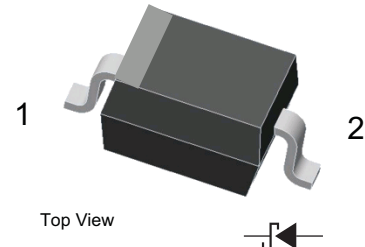
## Schottky Diodes

## BAT760

## ■ Features

- Very Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- High Conductance

SOD-323



## PIN DESCRIPTION

PIN	DESCRIPTION
1	Cathode
2	Anode

■ Absolute Maximum Ratings ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitance load, derate current by 20%.

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	30	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	21	
Average Rectified Output Current	$I_O$	1	A
Forward Current $t = 8.3$ ms Half Sinewave	$I_{FSM}$	5.5	
Power Dissipation	$P_D$	235	mW
Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	426	$^\circ\text{C}/\text{W}$
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature range	$T_{stg}$	-55 to 150	

Note 1: Part mounted on FR-4 PC board with recommended pad layout

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage (Note 2)	$V_R$	$I_R = 500 \mu\text{A}$	30			V
Forward voltage	$V_{F1}$	$I_F = 10 \text{ mA}$			0.27	
	$V_{F2}$	$I_F = 100 \text{ mA}$			0.35	
	$V_{F3}$	$I_F = 1 \text{ A}$			0.55	
Leakage current (Note 2)	$I_{R1}$	$V_R = 5 \text{ V}$			10	$\mu\text{A}$
	$I_{R2}$	$V_R = 8 \text{ V}$			20	
	$I_{R3}$	$V_R = 15 \text{ V}$			50	
Total Capacitance	$C_T$	$V_R = 5 \text{ V}, f = 1 \text{ MHz}$		25		pF

Note 2: Short duration pulse test used to minimize self-heating effect.

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■ Typical Characteristics

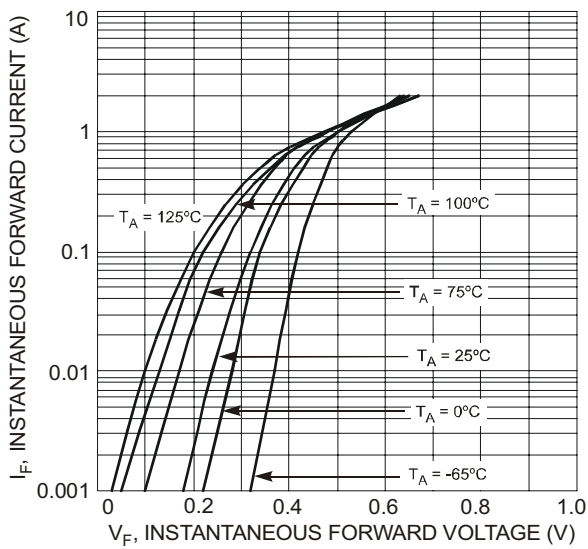


Fig. 1 Typical Forward Characteristics

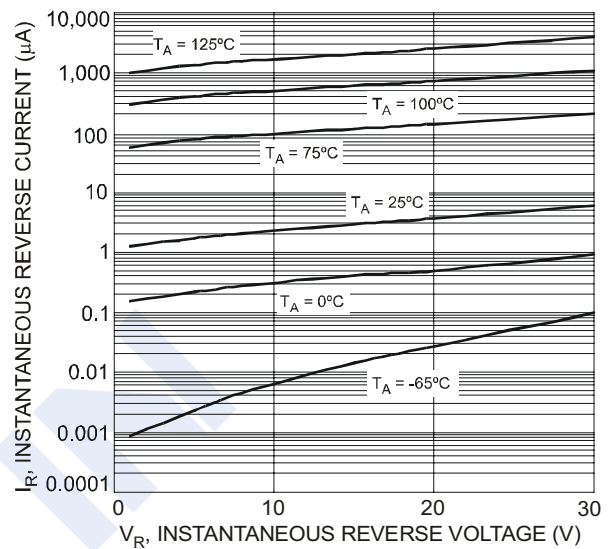


Fig. 2 Typical Reverse Characteristics

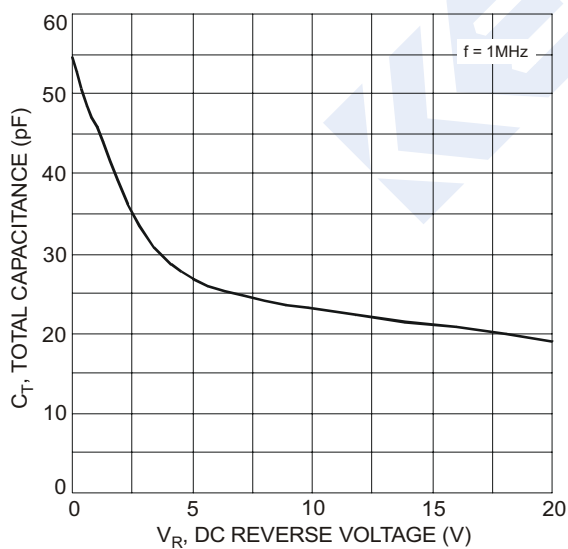


Fig. 3 Total Capacitance vs. Reverse Voltage

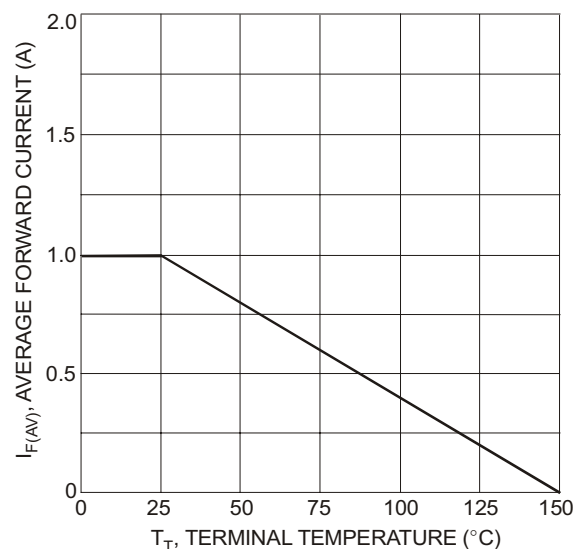


Fig. 4 Forward Current Derating Curve

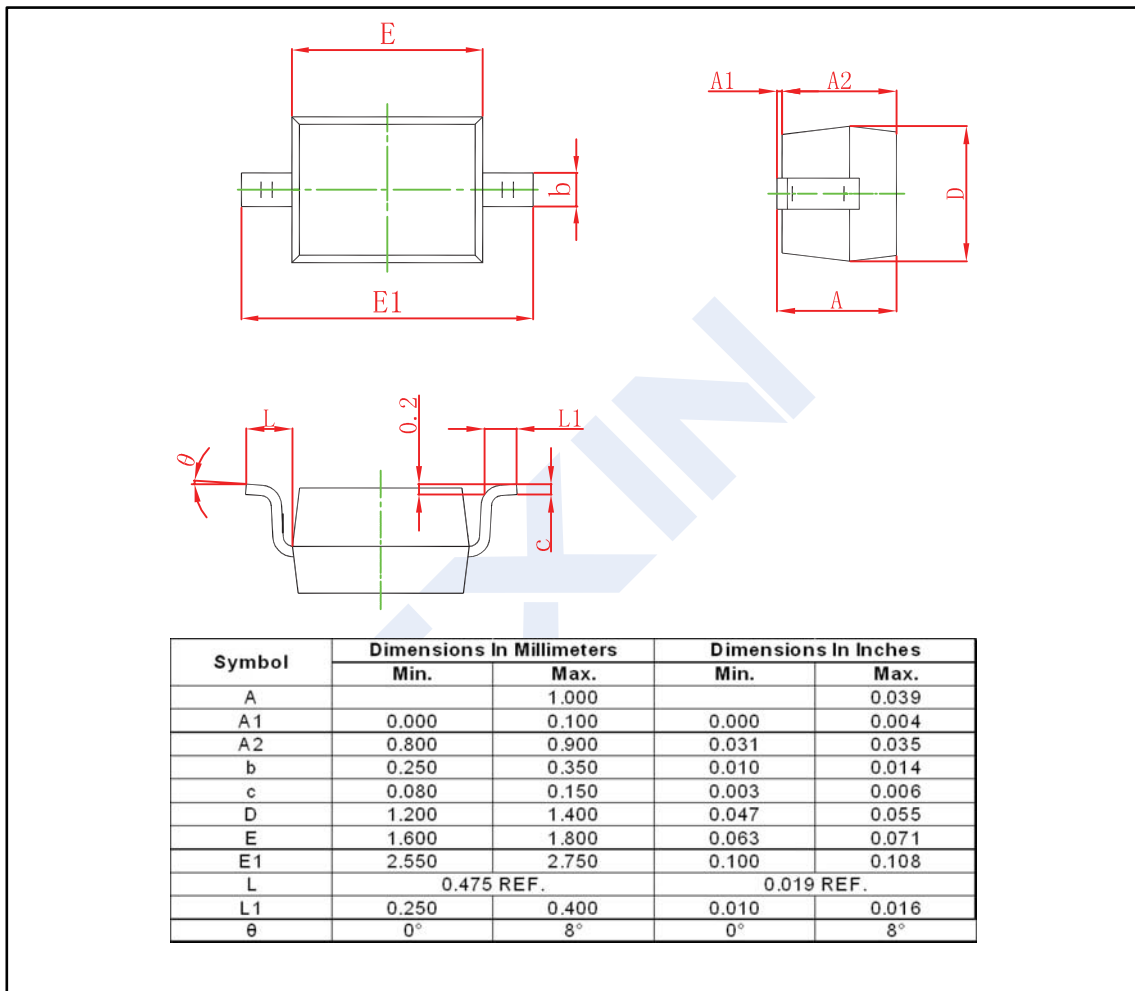
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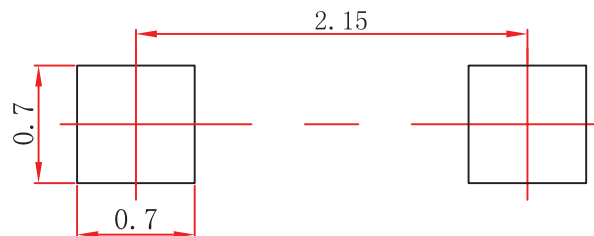
## ■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SOD-323



## ■ The Recommended Mounting Pad Size

**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.