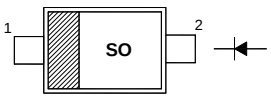
BAT46WS

SMALL SIGNAL SCHOTTKY BARRIER DIODE

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Features

- Low Forward Voltage drop
- Surface mount device

Description

- High voltage schottky rectifier suited for SLIC protection during the card insertion operation

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	150	mA
Power Dissipation	P_{tot}	230	mW
Thermal Resistance Junction Ambient	R_{thJA}	550	°C/W
Operating Junction Temperature Range	T_J	150	°C
Storage Temperature Range	T_{stg}	- 65 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at I_R = 100 µA	V_{BR}	100	-	-	V
Forward Voltage at I_F = 0.1 mA at I_F = 10 mA at I_F = 250 mA	V_F	 - - -	 - - -	 0.25 0.45 1	V
Reverse Current at V_R = 1.5 V at V_R = 10 V at V_R = 50 V at V_R = 75 V at V_R = 1.5 V, T_j = 60 °C at V_R = 10 V, T_j = 60 °C at V_R = 50 V, T_j = 60 °C at V_R = 75 V, T_j = 60 °C	I_R	 - - - - - - - -	 - - - - - - - -	 0.5 0.8 2 5 5 7.5 15 20	µA
Total Capacitance at V_R = 0 V, f = 1 MHz at V_R = 1 V, f = 1 MHz	C_T	 - -	 10 6	 - -	pF

Fig. 1: Forward current versus forward voltage at different temperatures (typical values).

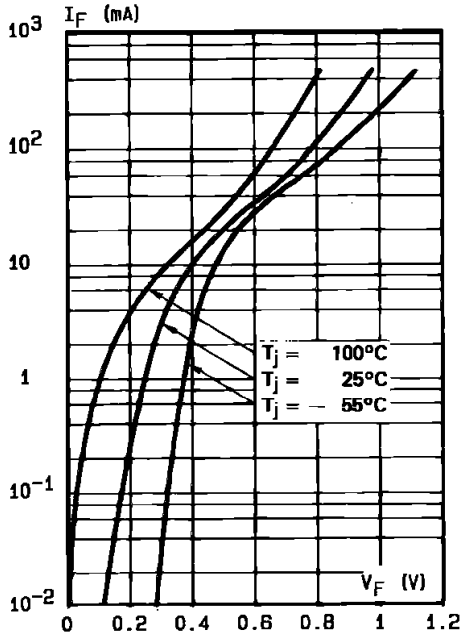


Fig. 2: Forward current versus forward voltage (typical values).

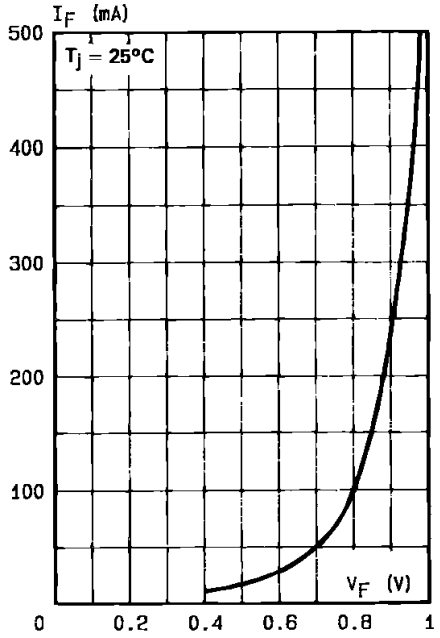


Fig. 3: Reverse current versus junction temperature (typical values).

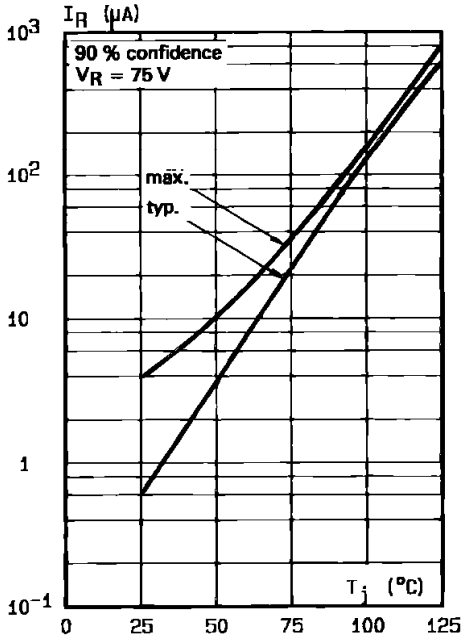
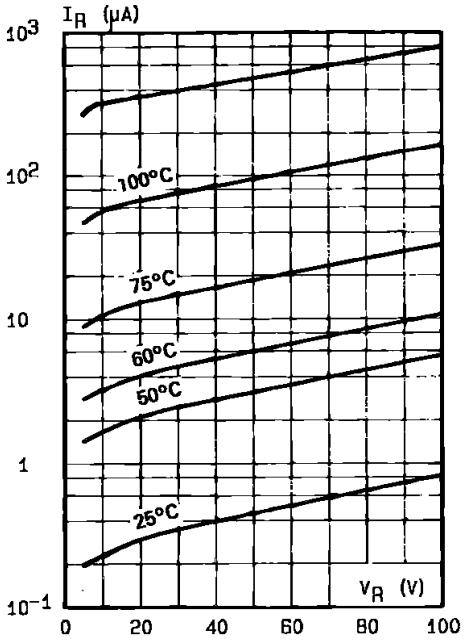
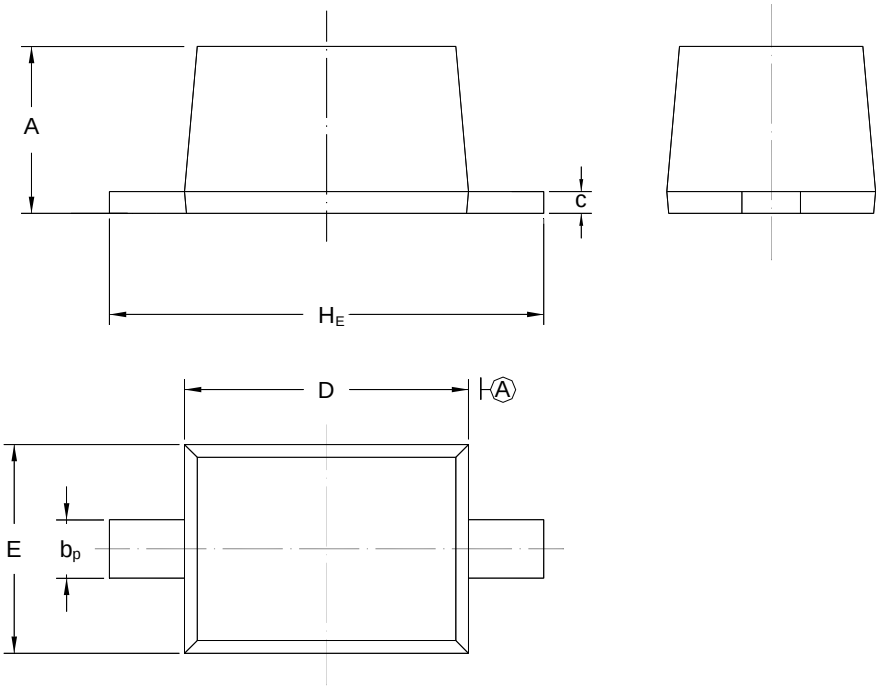


Fig. 4: Reverse current versus continuous reverse voltage (typical values).



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