

SOD-323 Plastic-Encapsulate Schottky Barrier Diode

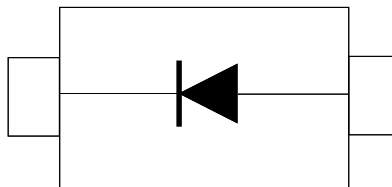
Description

General Application Schottky barrier rectifier, encapsulated in a SOD323 leadless ultra small, Surface-Mounted Device (SMD) plastic package.

Features

- Average forward current: I_O :70mA
- Reverse voltage: $V_R \geq 70$ V
- Low forward voltage: $V_F \leq 1.0V$ @15mA
- Low reverse current: $I_R \leq 0.1\mu A$ @50V
- High reliability

Schematic and Pin Configuration



SOD-323 (Top View)

Circuit Schematic

Package



SOD-323(Bottom View)

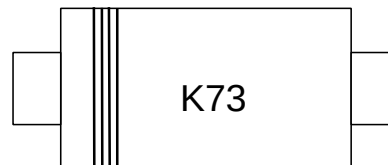
Mechanical Characteristics

- SOD-323 Small Outline Plastic Package
- Level 1 moisture sensitivity per J-STD-020
- Lead Finish: Matte Tin
- Case Material: “Green” Molding Compound
- We declare that the material of product compliance with RoHS requirements and Halogen Free

Applications

- Low voltage rectification
- Switch Mode Power Supply(SMPS)
- Inverse Polarity Protection
- Low Power Consumption Application

Marking Information



K73 = Device Marking Code

Bar denotes cathode

Ordering Information

Part Number	Shipping	Reel Size
BAS70WS	3000/Tape &Reel	7 inch

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
DC Reverse Voltage	V _R	70	V
Average Rectifier Forward Current	I _O	70	mA
Peak forward surge current 8.3 ms single half sine-wave	I _{FSM}	100	mA
Power Dissipation	PD	200	mW
Operating junction temperature	T _J	-40 ~ 125	°C
Storage temperature range	T _{STG}	-40~+150	°C

Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Maximum forward voltage	V _F	I _F = 1mA	-	-	0.41	V
		I _F = 15mA	-	-	1.0	V
Maximum reverse breakdown voltage	V _{BR}	I _R = 100μA	70	-	-	V
Maximum reverse current	I _R	V _R = 50V	-	-	0.1	μA
Type junction capacitance	C _J	V _R =0V, f = 1MHz	-	-	2	pF
Reverse recovery time	T _{rr}	I _F =200mA, I _{rr} =0.1×I _R , R _L =100Ω	-	-	5	ns

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

FIG.1-Forward current as a function of forward voltage; typical values

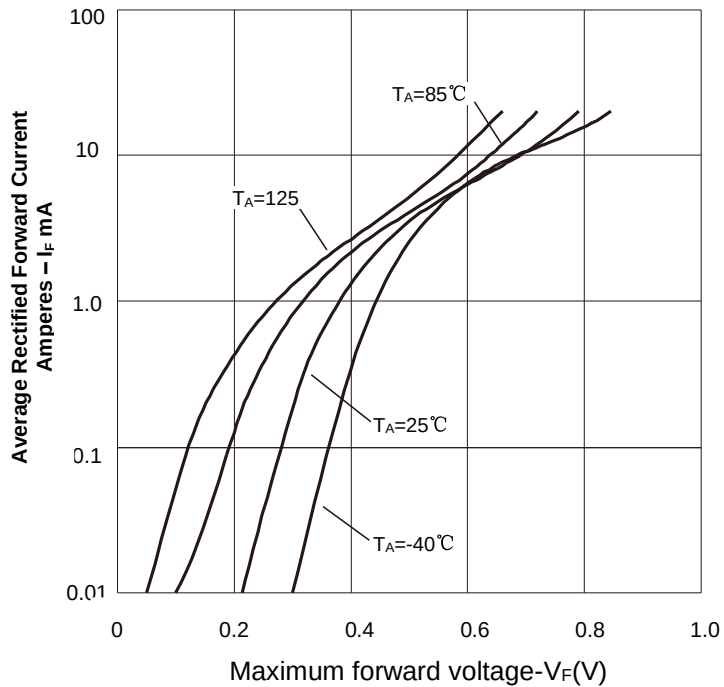


FIG.2-Reverse current as a function of reverse voltage; typical values.

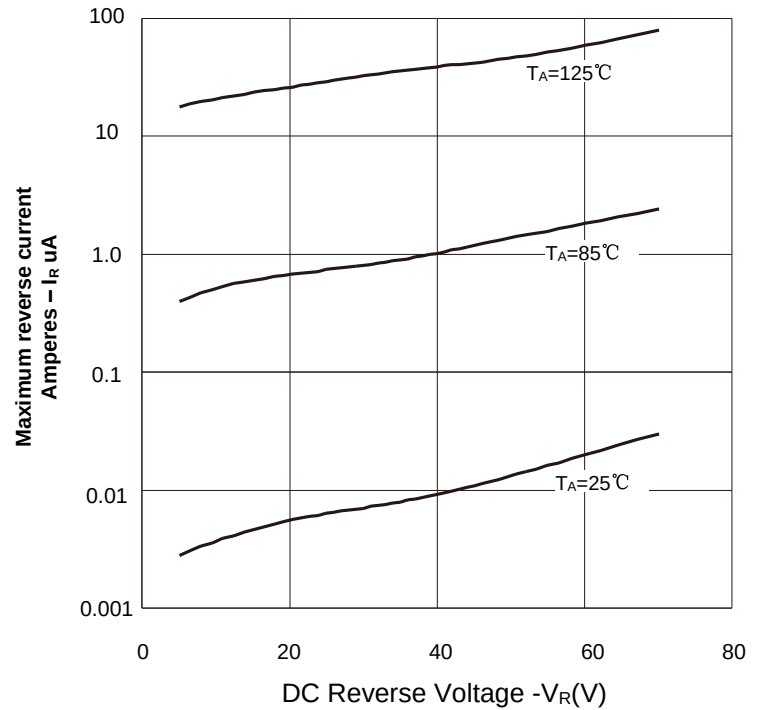


FIG.3-Power Derating Curve

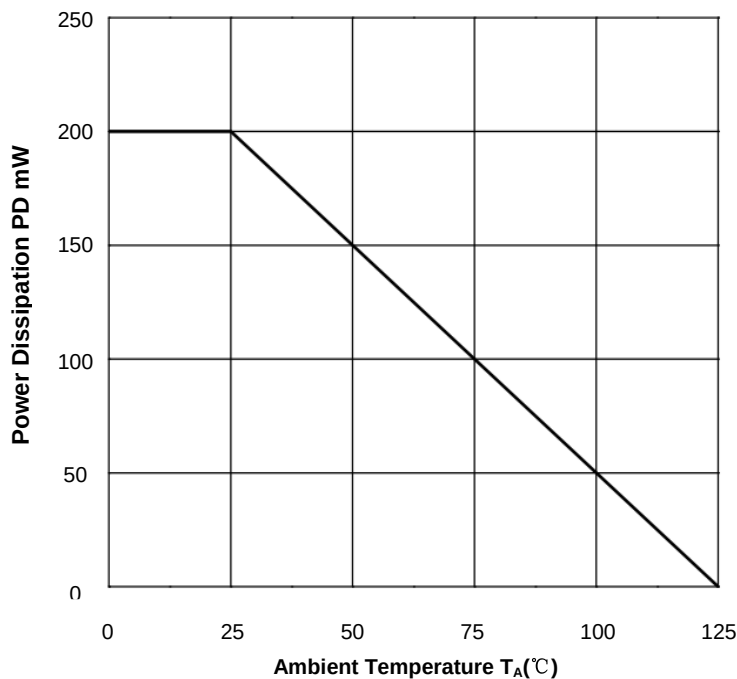
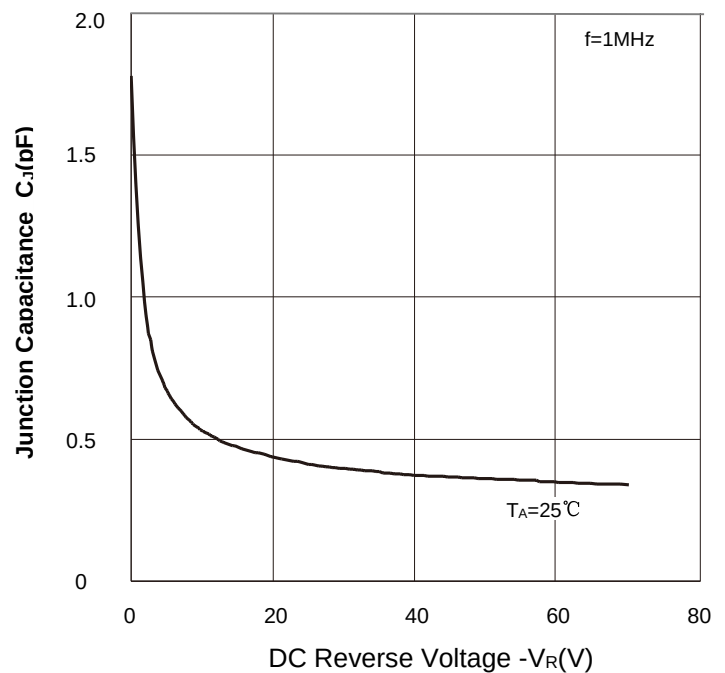
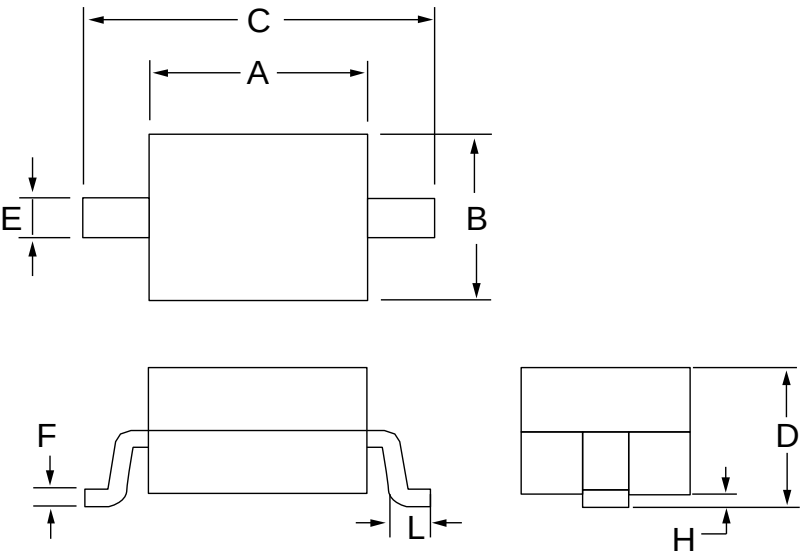


FIG.4-Diode capacitance as a function of reverse

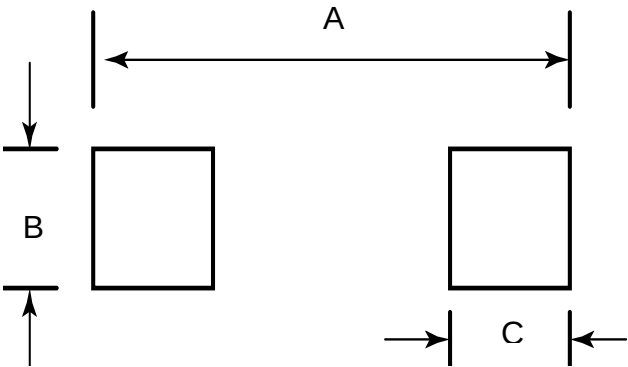


SOD-323 Package Outline Drawing



SYM	DIMENSIONS				
	MILLIMETERS			INCHES	
	MIN	NOM	MAX	MIN	MAX
A	1.50	1.65	1.80	0.060	0.071
B	1.20	1.30	1.40	0.045	0.054
C	2.30	2.50	2.70	0.090	0.107
D	-		1.10	-	0.043
E	0.30		0.40	0.012	0.016
F	0.10		0.25	0.004	0.010
L	0.20		0.40	0.008	0.016
H	-		0.10	-	0.004

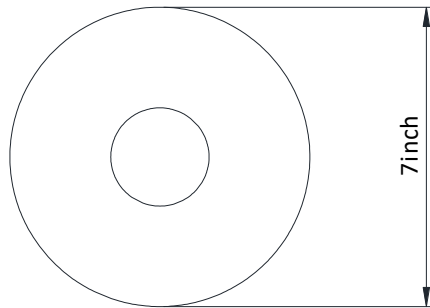
Suggested Land Pattern



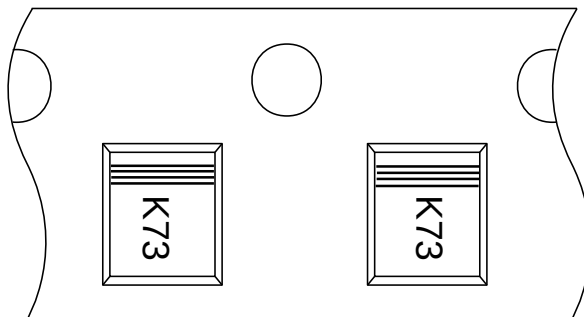
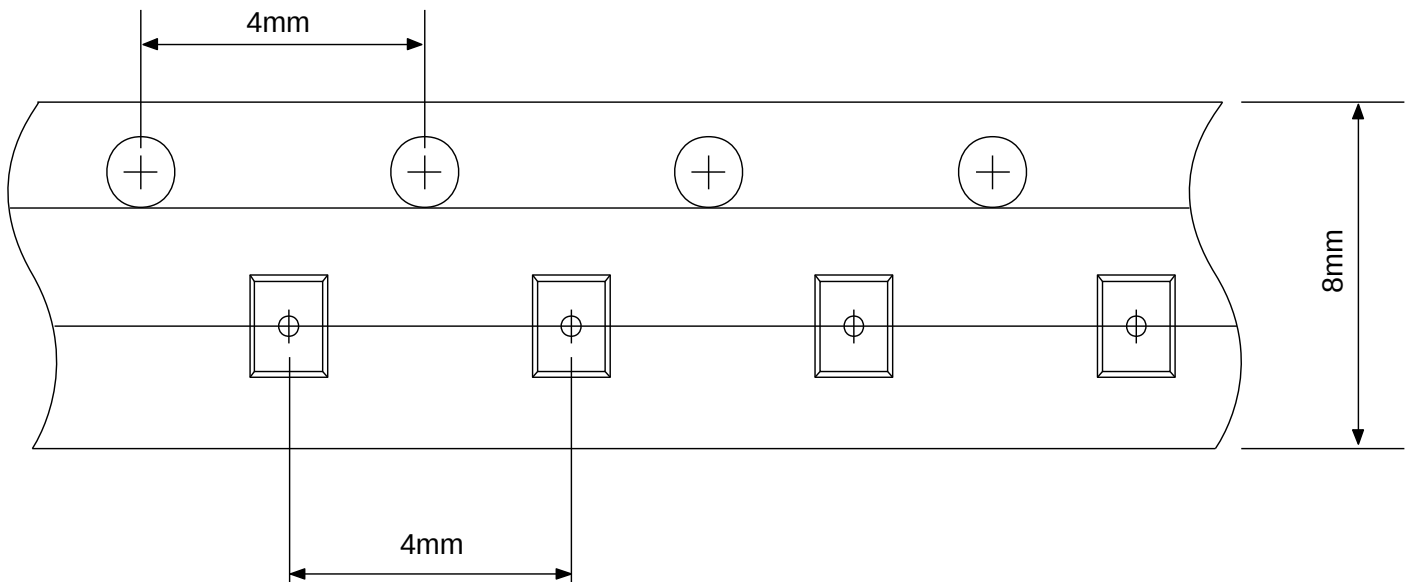
SYM	DIMENSIONS	
	MILLIMETERS	INCHES
A	3.15	0.120
B	0.80	0.031
C	0.80	0.031

TAPE AND REEL INFORMATION

Reel Dimensions



Tape Dimensions



User Direction of Feed

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