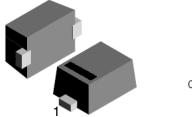
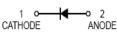


# Schottky Barrier Diode in SOD-923

#### **Features**

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Low Reverse Recovery Time
- Low Reverse Capacitance





#### **Mechanical Data**

- Case: SOD-923 (plastic package).
  Lead free; RoHS compliant; Halogen free
- Molding Compound Flammability Rating: UL 94 V-0
- **Terminals:** High temperature soldering guaranteed: 260 °C/10 sec. at terminals

## **Applications**

- Low current rectification
- High efficiency DC-to-DC conversion
- Switch Mode Power Supply (SMPS)
- Reverse polarity protection
- Low power consumption applications

### **Absolute Maximum Ratings**

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Limit	Unit
DC reverse voltage	V <sub>R</sub>	30	V
Mean rectifying current	I <sub>FM</sub>	200	mA
Non-repetitive Peak forward surge current @ t=8.3ms	I <sub>FSM</sub>	600	mA
Power dissipation	PD	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	667	°C/W
Junction temperature	Tj	125	${\mathfrak C}$
Storage temperature	T <sub>stg</sub>	-55~+150	℃

### **Electrical Characteristics**

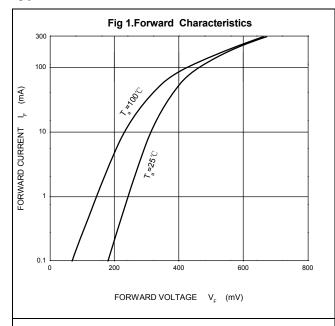
(T<sub>A</sub> = 25 °C unless otherwise specified)

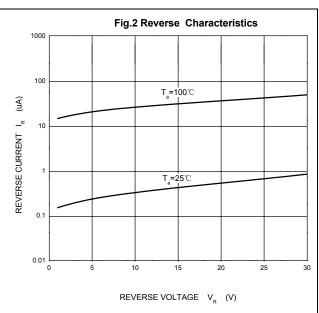
Symbol	Parameter	Conditions	Min	Тур	Max	Units
BV <sub>R</sub>	Breakdown Voltage	I <sub>R</sub> = 100μA	30			V
I <sub>R</sub>	Reverse Current	V <sub>R</sub> = 25V			2	μA
		I <sub>F</sub> = 0.1mA			0.24	V
		I <sub>F</sub> = 1mA			0.32	V
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 10mA			0.40	V
VF		I <sub>F</sub> = 30mA			0.50	V
		I <sub>F</sub> = 100mA			0.80	V
С	Capacitance	V <sub>R</sub> = 1V, f = 1MHz			10	pF
T <sub>RR</sub>	Reverse Recovery Time	$I_F = I_R = 10 \text{mA}$ $I_{RR} = 1 \text{mA}, R_L = 100 \Omega$			5	ns

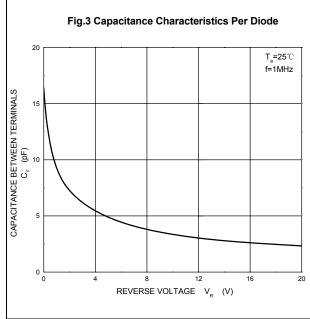
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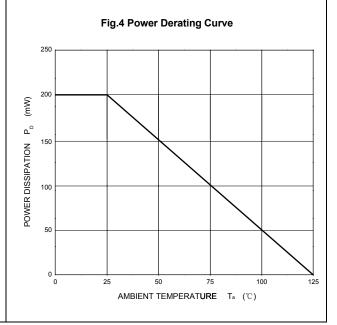


## Typical Characteristics (T<sub>amb</sub> = 25 °C unless otherwise specified)



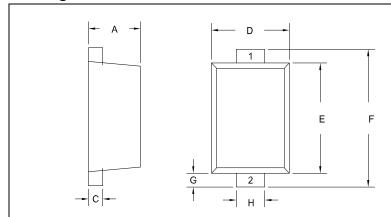






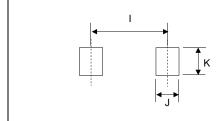


## **Package Dimensions**



Dim	millmeters		
ווווט	min	max	
Α	0.39	0.45	
С	0.05	0.20	
D	0.55	0.65	
Е	0.70	0.90	
F	0.90	1.10	
G	0.05	0.15	
Н	0.15	0.30	

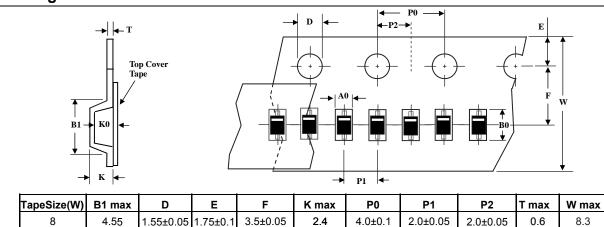
### **Pad Dimensions**



Dim	millmeters
I	0.9
J	0.3
K	0.3

2.0±0.05

## **Package Informations**



8 Note:1.Unit: mm

> 2. A0, B0, and K0 are determined by component size. The clearance between the components and the cavity must be within 0.05mm min to 0.50 mm max. The component cannot rotate more than 10° within the determined cavity.

## **Ordering information**

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
CS9DBAT54	C4	SOD-923	Tape and reel	8000pcs / reel	EIA STD RS-481

## **Revision history**

Date	Revision	Changes
12-Feb2019	1.0	Initial release

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