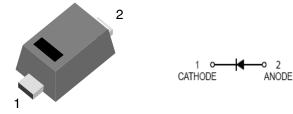


# Schottky Barrier Diode in SOD-523

#### **Features**

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



#### **Mechanical Data**

■ Case: SOD-523 (plastic package). Lead free; RoHS compliant

■ 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>	40	V
Mean rectifying current	I <sub>FM</sub>	350	mA
Non-repetitive Peak forward surge current @ t=8.3ms	I <sub>FSM</sub>	2	А
Power dissipation	PD	150	mW
Thermal Resistance Junction to Ambient	RθJA	667	°C/W
Junction temperature	Tj	125	℃
Storage temperature	Tstg	-55~+150	°C

### **Electrical Characteristics**

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

(A) as a similar specimen,						
Parameter	Symbol	Min	Тур	Max	Unit	Conditions
Forward voltage	V <sub>F1</sub>			0.37	V	IF=20mA
Forward voltage	V <sub>F2</sub>			0.6	V	IF=200mA
Reverse current	I <sub>R</sub>			5	μA	VR=30V

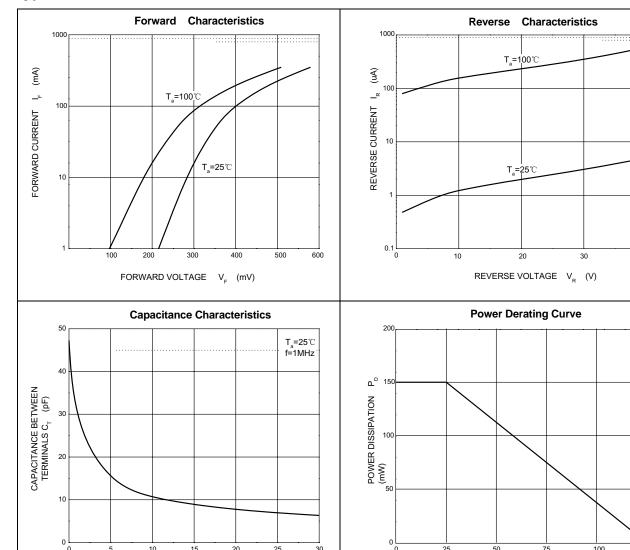
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AMBIENT TEMPERATURE  $T_a$  (°C)

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

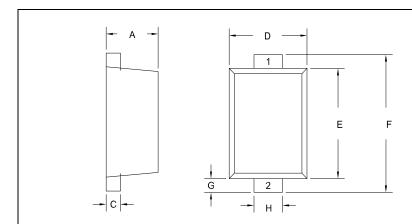
REVERSE VOLTAGE  $V_R$  (V)



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# **Package Dimensions**



Dim	millmeters			
Dilli	min	max		
Α	0.50	0.70		
С	0.07	0.20		
D	0.70	0.90		
Е	1.10	1.30		
F	1.50	1.70		
G	0.15	0.25		
Н	0.25	0.35		

# Marking



# **Ordering information**

Order code	Package	Packaging option	Base quantity	Packaging specification
SD103AX	SOD-523	Tape and reel	8000pcs / reel	EIA STD RS-481

# **Revision history**

Date	Revision	Changes
23-May-2012	1.0	Initial release

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