



**WSD520S/521S**

**Surface Mount Schottky Barrier Diodes**

**(Pb)** Lead(Pb)-Free

**SMALL SIGNAL  
SCHOTTKY DIODES  
200m AMPERES  
30 VOLTS**

**Feature:**

- \*Extremely High Switching Speed.
- \*Low Forward Voltage and Low Reverse Current.
- \*High Reliability.
- \*Schottky Barrier Diodes Encapsulated in a SOD-523 Package

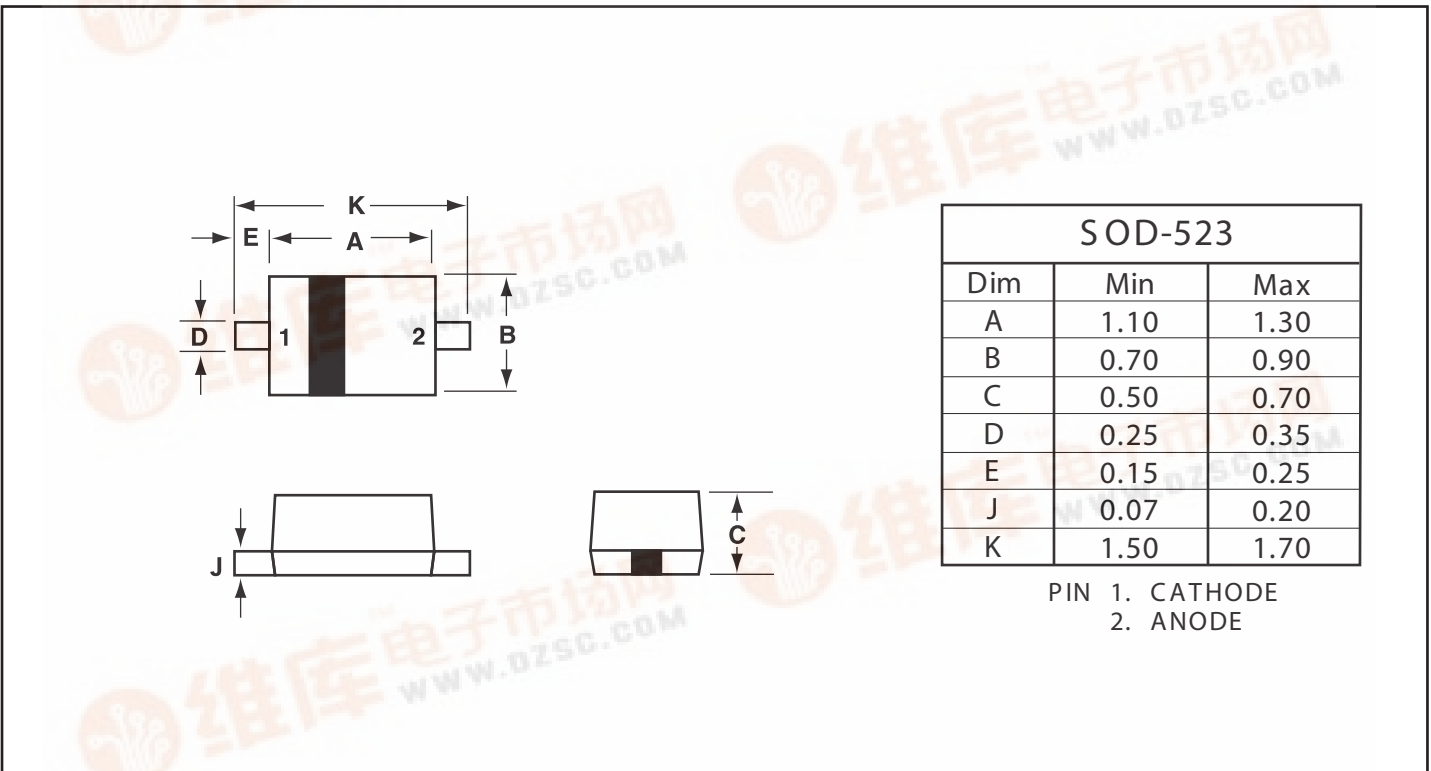
**Description:**

These schottky barrier diodes are designed for high speed switching applications circuit protection, and voltage clamping, Extremely low forward voltage reduces conduction loss, Miniature surface mount package is excellent for hand held and portable applications where space is limited.



**SOD-523 Outline Dimensions**

Unit:mm




**Maximum Ratings** ( $T_a=25^{\circ}\text{C}$  Unless otherwise noted)

Characteristic	Symbol	Value	Unit
Reverse Voltage	$V_R$	30	Volts
Average Rectifier Forward Current	$I_F(AV)$	200	mA
Peak Forward Surge Current <sup>(1)</sup>	$I_{FSM}$	1.0	A
Operating Junction Temperature Range	$T_J$	125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	-40 to +125	$^{\circ}\text{C}$

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

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage ( $I_R=100\mu\text{A}$ )	$V_{(BR)R}$	30		Volts
Forward Voltage $I_F=200\text{mA}$	$V_F$		0.60	Volts
WSD520S			0.50	
Reverse Leakage $V_R=10\text{V}$	$I_R$		1.0	$\mu\text{A}_{dc}$
WSD521S			30.0	

NOTE: 1. 60HZ for 1 **Device Marking**

Item	Marking	Equivalent Circuit diagram
WSD520S	B, 5J	
WSD521S	C, 5M	

Electrical characteristic curves ( $T_a=25^\circ\text{C}$ )

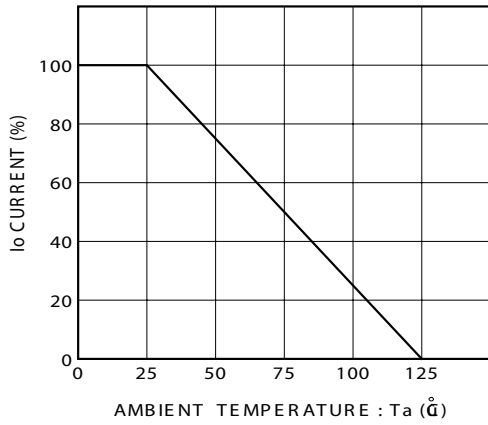


Fig. 1. Derating curve (mounting on glass epoxy PCBs)

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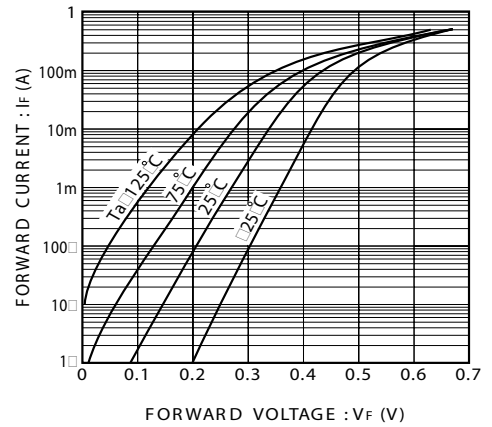


Fig. 2 Forward characteristics

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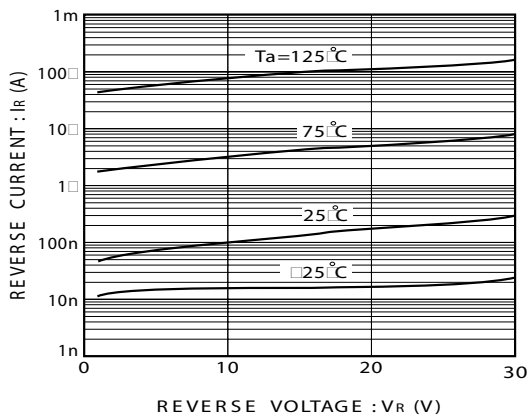


Fig. 3 Reverse characteristics

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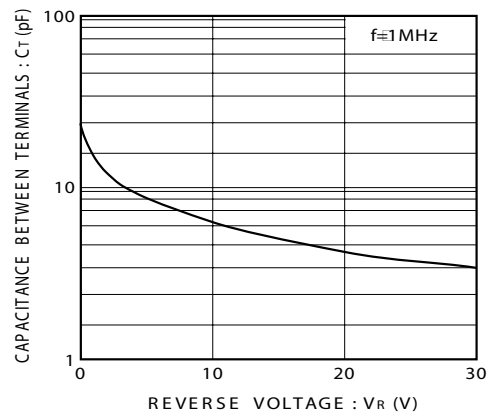


Fig. 4 Capacitance between terminals characteristics

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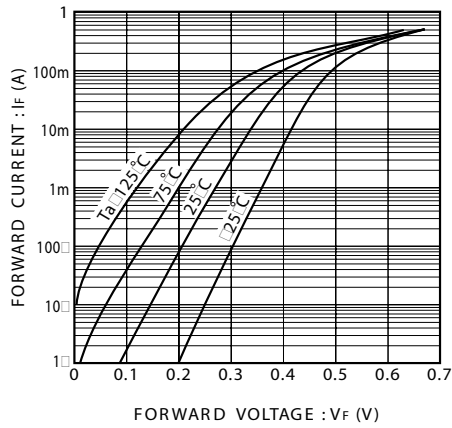


Fig. 5 Forward characteristics

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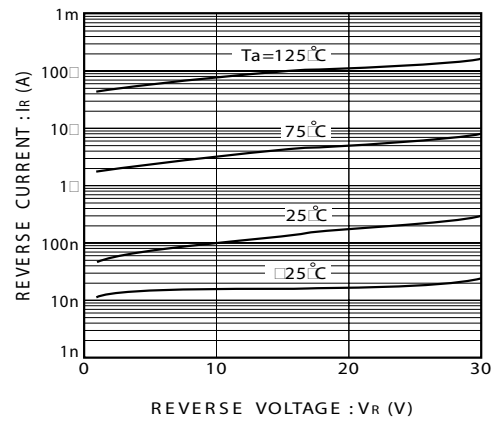


Fig. 6 Reverse characteristics

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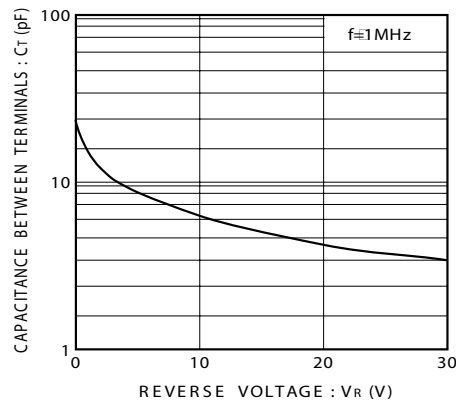


Fig. 7 Capacitance between terminals characteristics