

Surface Mount Schottky Barrier Diodes

Pb Lead(Pb)-Free

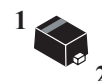
Feature:

- *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.

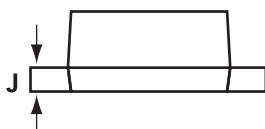
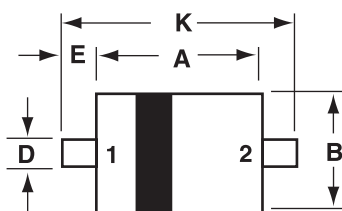
**SMALL SIGNAL
SCHOTTKY DIODES
200m AMPERES
30 VOLTS**



SOD-523

SOD-523 Outline Dimensions

Unit:mm



SOD-523		
Dim	Min	Max
A	1.10	1.30
B	0.70	0.90
C	0.50	0.70
D	0.25	0.35
E	0.15	0.25
J	0.07	0.20
K	1.50	1.70

PIN 1. CATHODE
2. ANODE

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 ⁽¹⁾	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 $I_F=200\text{mA}$ WSD520S WSD521S	V_F		0.60 0.50	Volts
Reverse Leakage $V_R=10\text{V}$ WSD520S WSD521S	I_R		1.0 30.0	μA_{dc}

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

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

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

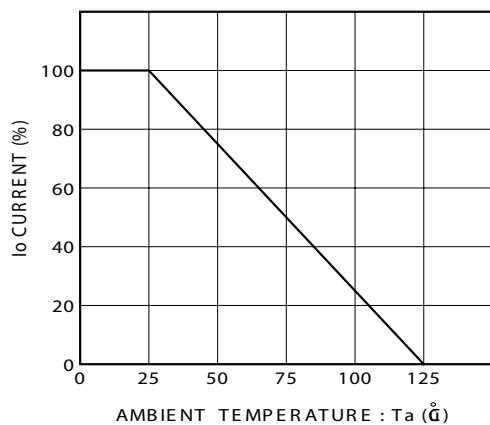


Fig 1. Derating curve
(mounting on glass epoxy PCBs)

WSD520S

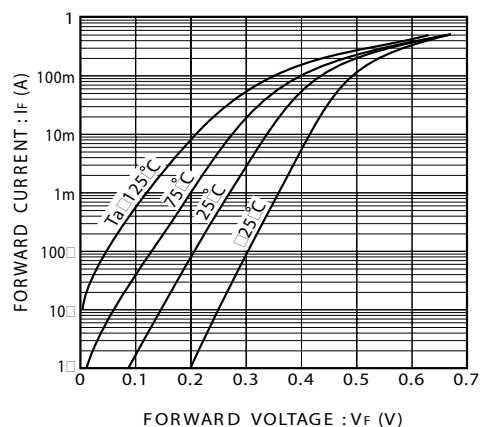


Fig. 2 Forward characteristics

WSD520S

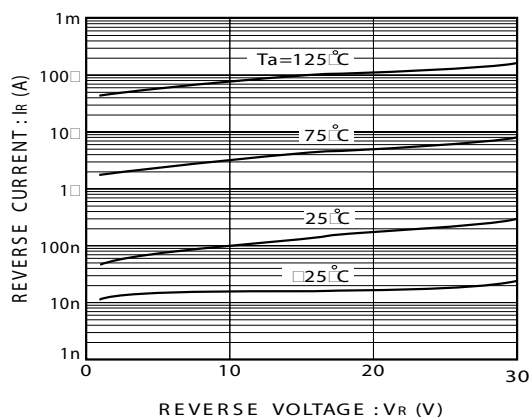


Fig. 3 Reverse characteristics

WSD520S

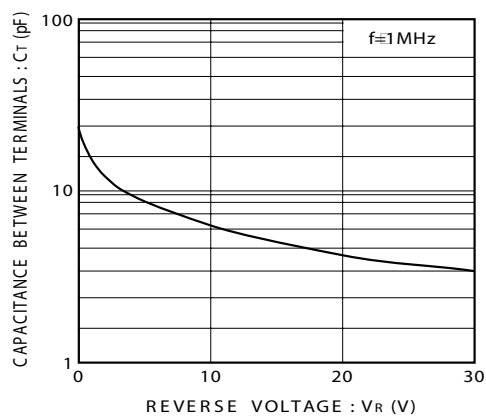


Fig. 4 Capacitance between
terminals characteristics

WSD521S

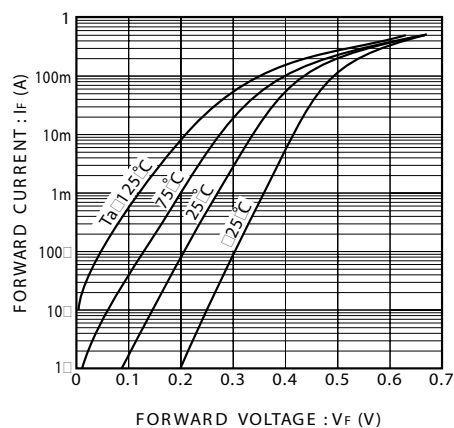


Fig. 5 Forward characteristics

WSD521S

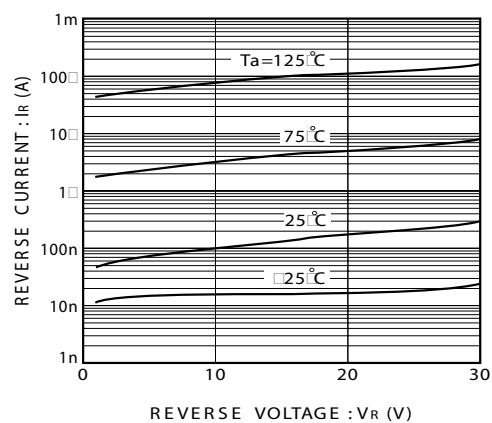


Fig. 6 Reverse characteristics

WSD521S

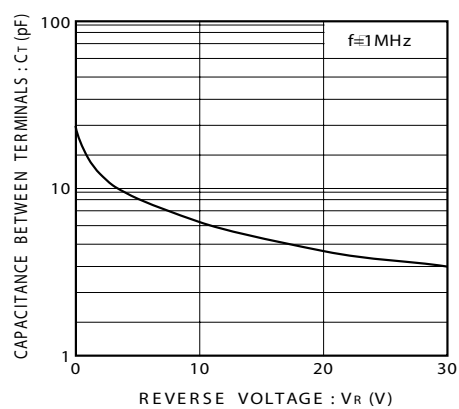


Fig. 7 Capacitance between terminals characteristics