

### Surface Mount Schottky Barrier Diodes

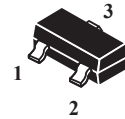
**Features:**

- \*Low Power Rectification
- \*Small Surface Mounting Type
- \*Low  $I_R$  ( $I_R=50nA$  Typ)
- \*High Reliability

**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.

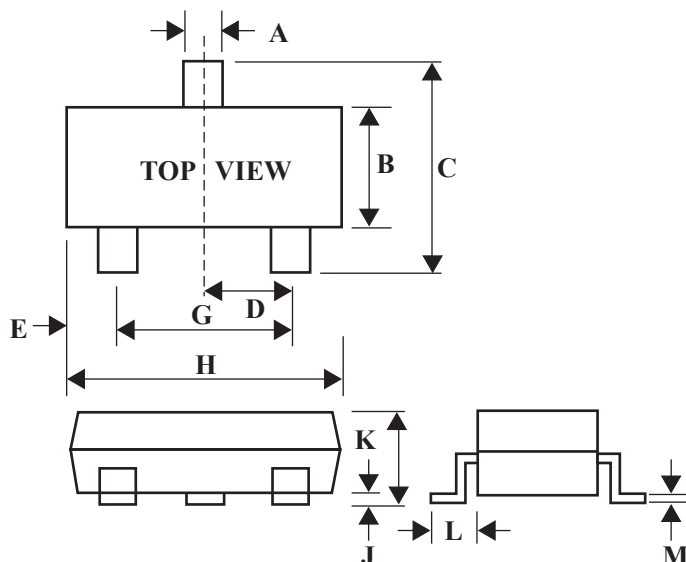
**SMALL SIGNAL  
SCHOTTKY DIODES  
100m AMPERES  
40 VOLTS**



**SOT-23**

### SOT-23 Outline Dimensions

Unit:mm



Dim	Min	Max
A	0.35	0.51
B	1.19	1.40
C	2.10	3.00
D	0.85	1.05
E	0.46	1.00
G	1.70	2.10
H	2.70	3.10
J	0.01	0.13
K	0.89	1.10
L	0.30	0.61
M	0.076	0.25

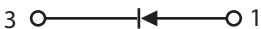
**Maximum Ratings** ( $T_A=25^{\circ}\text{C}$  Unless Otherwise Note)

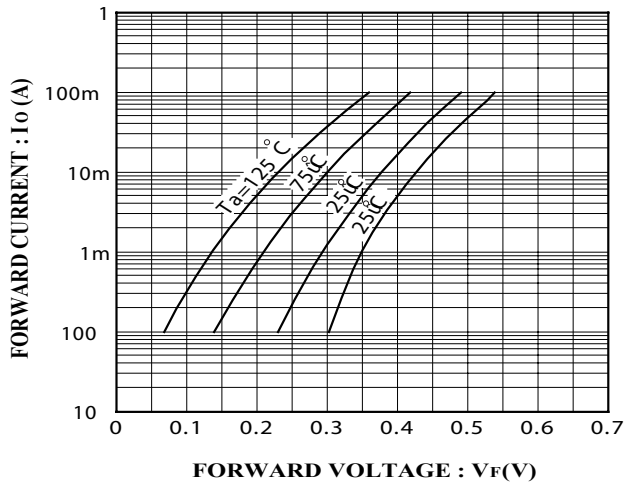
Characteristic	Symbol	Limits	Unit
Peak Reverse Voltage	$V_{RM}$	40	V
DC Reverse Voltage	$V_R$	40	V
Mean Rectifying Current	$I_O$	100	mA
Peak Forward Surge Current <sup>(1)</sup>	$I_{FSM}$	1	A
Junction Temperature	$T_j$	125	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-40 + 125	$^{\circ}\text{C}$

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

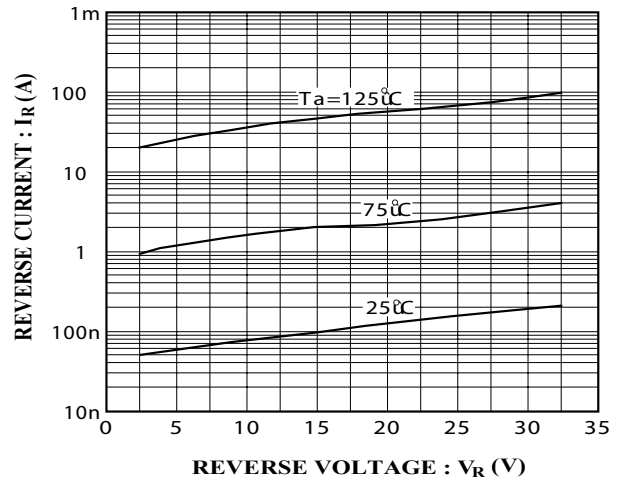
Characteristic	Symbol	Min	Typ	Max	Unit
Forward Voltage, $I_F=10\text{mA}$	$V_F$	-	-	0.45	V
Reverse Current, $V_F=10\text{V}$	$I_R$	-	-	1	$\mu\text{A}$
Capacitance Between Terminals $V_R=10\text{V}$ $f=1\text{MHz}$	$C_T$	-	6.0	-	Pf

Note: 1.60Hz for 1 **Device Marking**

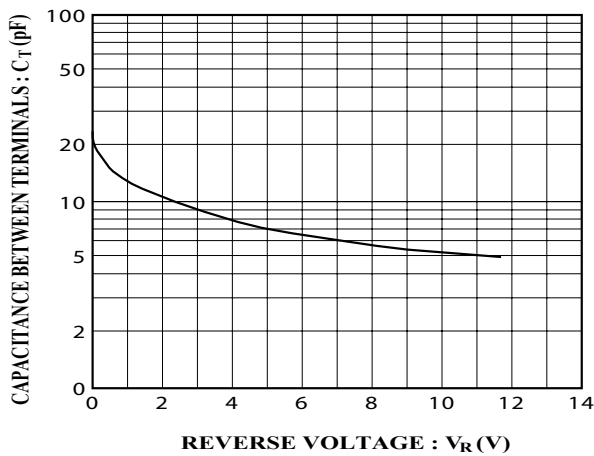
Item	Marking	Equivalent Circuit diagram
WSD420	LV3	



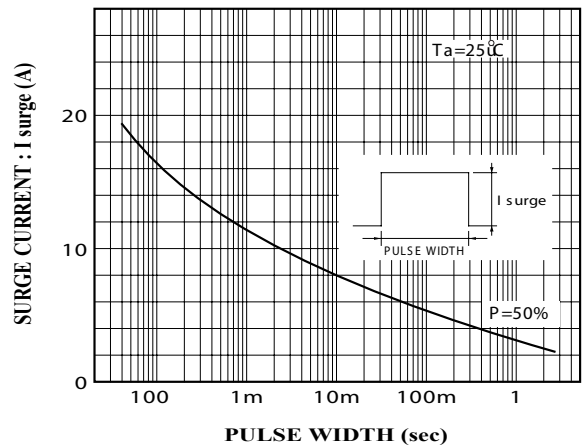
**FIG1. Forward characteristics**



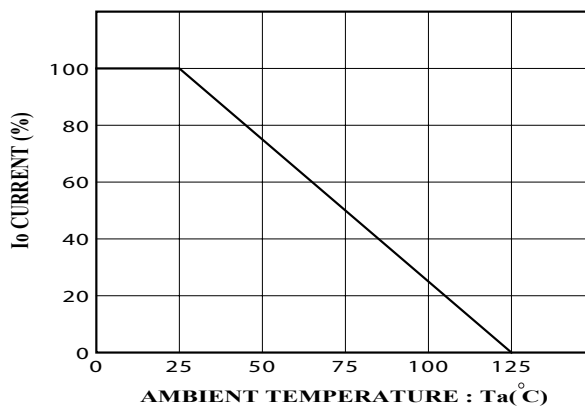
**FIG2. Reverse characteristics**



**FIG3. Capacitance between terminals characteristics**



**FIG4. Surge current characteristics**



**FIG5. Derating curve (mounting on glass epoxy PCBs)**