

Surface Mount Schottky Barrier Diodes

(Pb) Lead(Pb)-Free

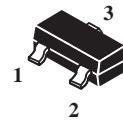
Features:

- *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.

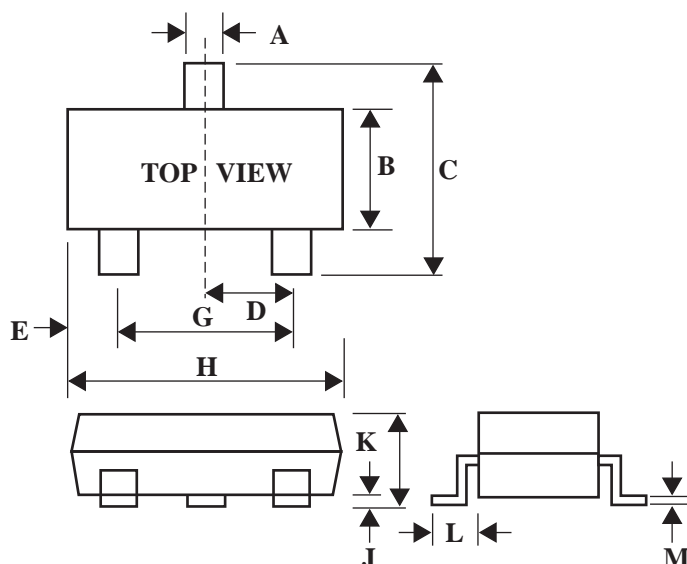
**SMALL SIGNAL
SCHOTTKY DIODES
100m AMPERES
40 VOLTS**



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 ⁽¹⁾	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	μA
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	

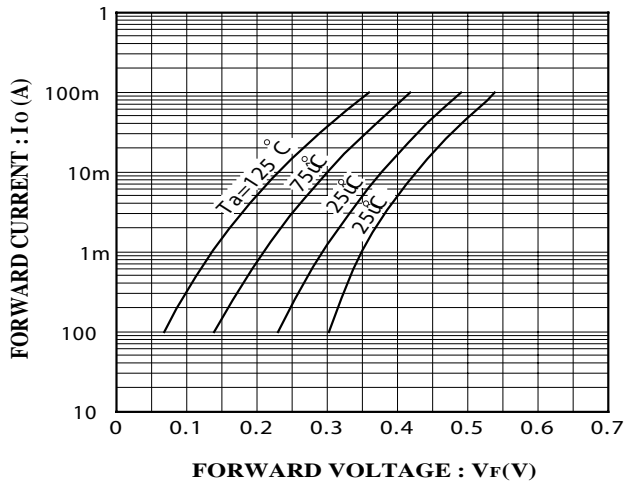


FIG1. Forward characteristics

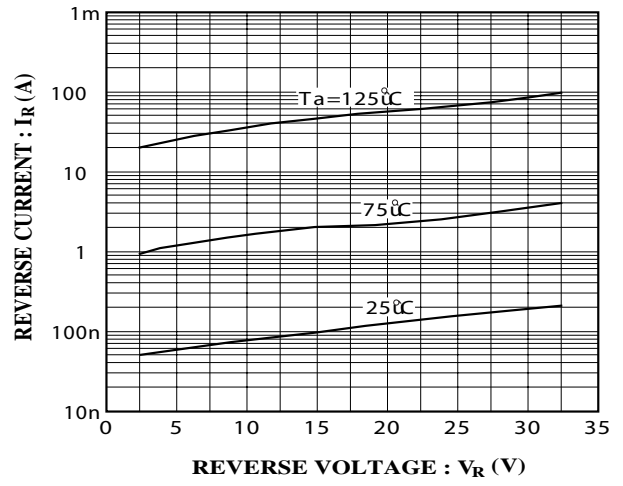


FIG2. Reverse characteristics

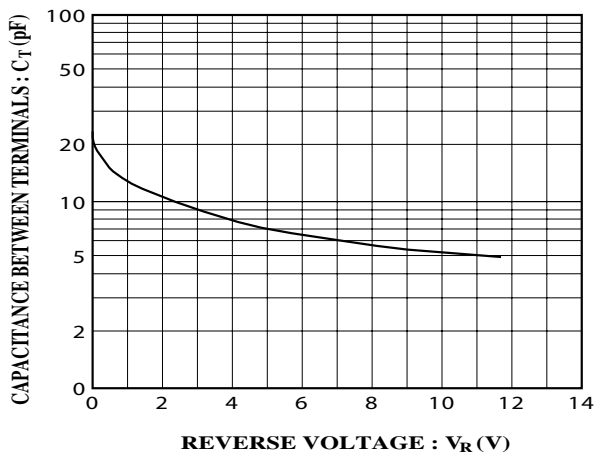


FIG3. Capacitance between terminals characteristics

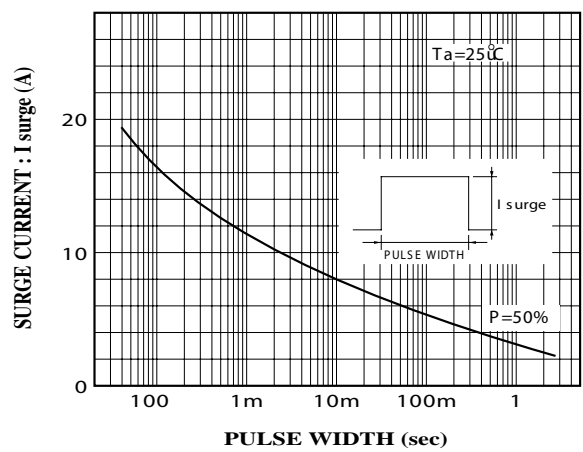


FIG4. Surge current characteristics

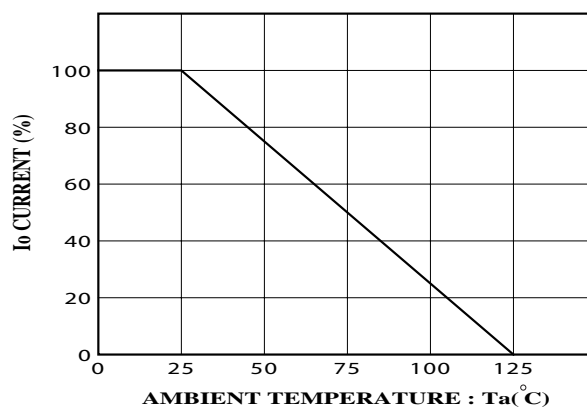


FIG5. Derating curve (mounting on glass epoxy PCBs)