

### Surface Mount Schottky Barrier Diodes

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

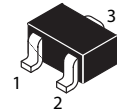
**Features:**

- \*Small mold type.
- \*Low VF
- \*High reliability.

**Construction:**

Silicon epitaxial planer

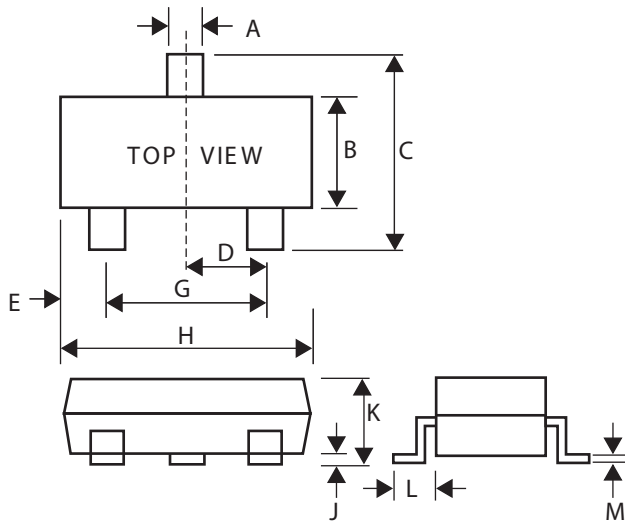
**SMALL SIGNAL  
SCHOTTKY DIODES  
100m AMPERES  
40 VOLTS**



**SOT-323(SC-70)**

### SOT-323 Outline Demensions

Unit:mm



SOT-323		
Dim	Min	Max
A	0.30	0.40
B	1.15	1.35
C	2.00	2.40
D	-	0.65
E	0.30	0.40
G	1.20	1.40
H	1.80	2.20
J	0.00	0.10
K	0.80	1.00
L	0.42	0.53
M	0.10	0.25

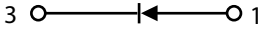
**Maximum Ratings** ( $T_a=25^{\circ}\text{C}$  Unless otherwise noted)

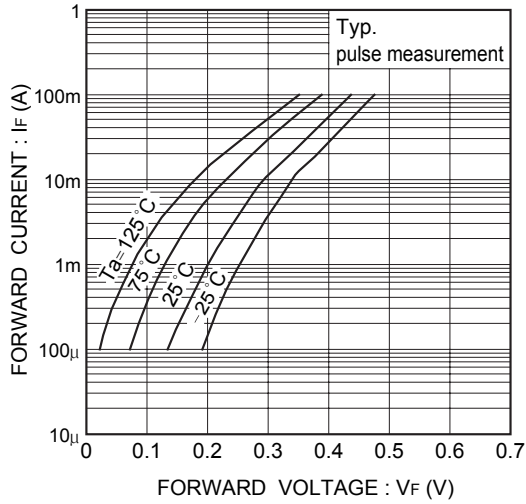
Characteristic	Symbol	Value	Unit
Reverse Voltage (repetitive peak)	$V_{RM}$	40	Volts
Reverse Voltage (DC)	$V_R$	40	mA
Average rectified forward current	$I_O$	100	mA
Forward Current surge peak (60Hz, 1cyc)	$I_{FSM}$	1	A
Operating Junction Temperature Range	$T_J$	125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	150	$^{\circ}\text{C}$

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

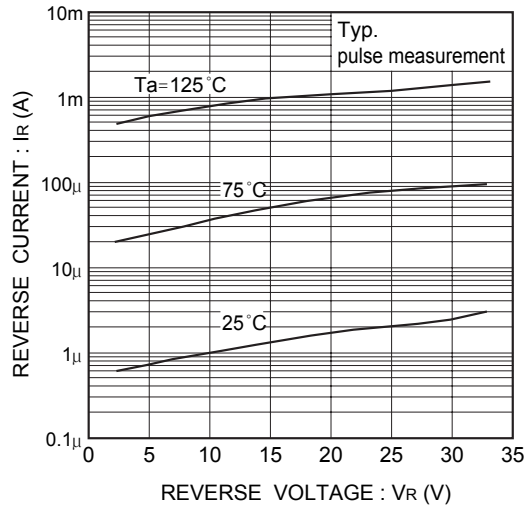
Characteristic	Symbol	Min	Typ	Max	Unit
Forward Voltage $I_F=100\text{mA}$ $I_F=10\text{mA}$	$V_{F1}$ $V_{F2}$	- -	- -	0.55 0.34	Volts
Capacitance between terminals ( $V_R=10\text{V}$ , $f=1.0\text{MHz}$ )	$C_T$	-	6.0	-	pF
Reverse current ( $V_R=10\text{V}$ )	$I_R$	-	-	30	$\mu\text{A}_{dc}$

**Device Marking**

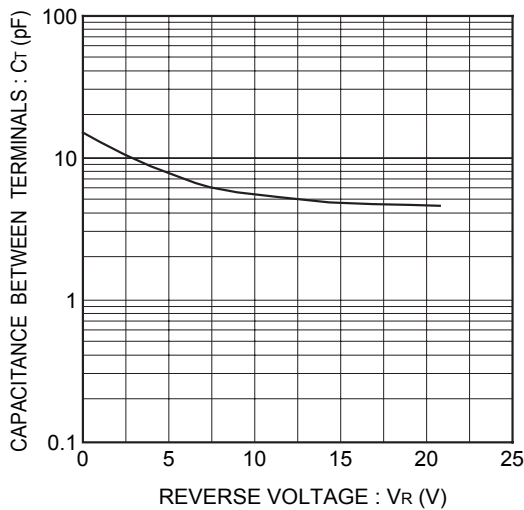
Item	Marking	Equivalent Circuit Diagram
WSD451F	B4, KL5	



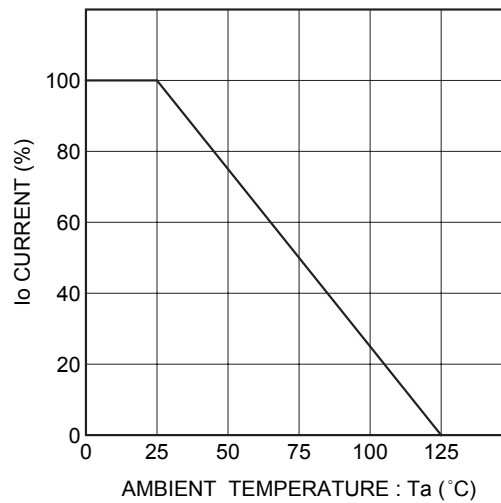
**Fig. 1 Forward characteristics**



**Fig. 2 Reverse characteristics**



**Fig. 3 Capacitance between terminals characteristics**



**Fig. 4 Derating curve (mounting on glass epoxy PCBs)**