

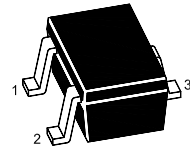
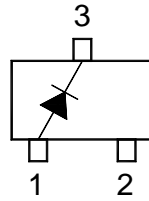
SB451W

Silicon Epitaxial Planar Schottky Barrier Diode

for low power rectification

Features

- Small surface mounting type
- Low forward voltage
- High reliability



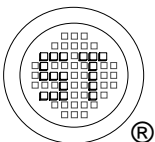
SOT-323 Plastic Package

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	40	V
Reverse Voltage	V_R	40	V
Average Forward Current	$I_{F(AV)}$	100	mA
Peak Forward Surge Current ($t = 8.3\text{ ms}$)	I_{FSM}	1	A
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 40 to + 125	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	typ.	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$ at $I_F = 100\text{ mA}$	V_F	-	0.34	V
	V_F	-	0.55	V
Reverse Current at $V_R = 20\text{ V}$	I_R	-	30	μA
Capacitance between Terminals at $V_R = 10\text{ V}$, $f = 1\text{ MHz}$	C_T	6	-	pF



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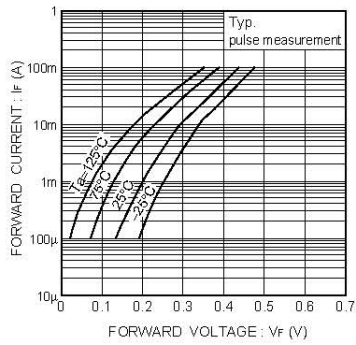


Fig. 1 Forward characteristics

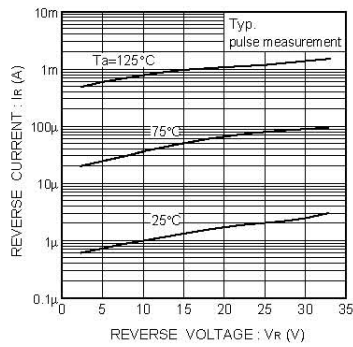


Fig. 2 Reverse characteristics

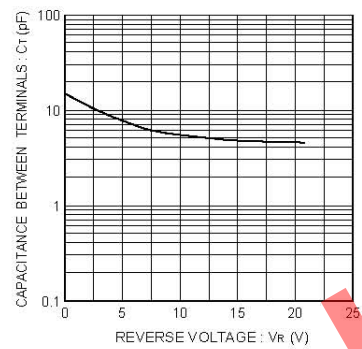


Fig. 3 Capacitance between terminals characteristics

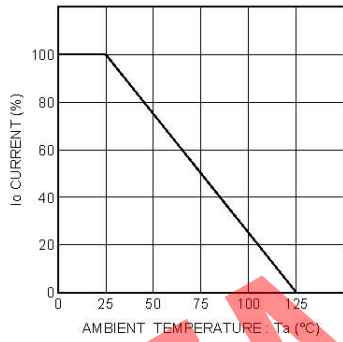
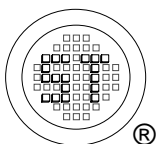


Fig. 4 Derating curve (mounting on glass epoxy PCBs)



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