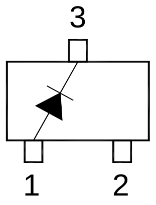
SB451W

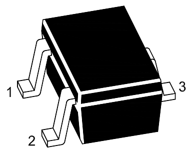
Silicon Epitaxial Planar Schottky Barrier Diode

for low power rectification

Features

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





SOT-323 Plastic Package

Absolute Maximum Ratings (T_a = 25 °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 ms)	I_{FSM}	1	A
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	- 40 to + 125	°C

Characteristics at T_a = 25 °C

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

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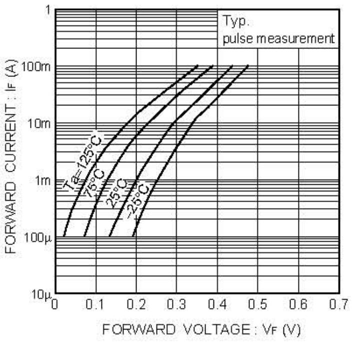

Fig. 1 Forward characteristics

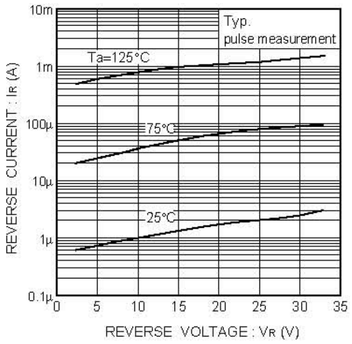

Fig. 2 Reverse characteristics

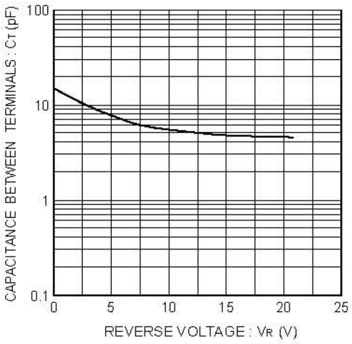

Fig. 3 Capacitance between terminals characteristics

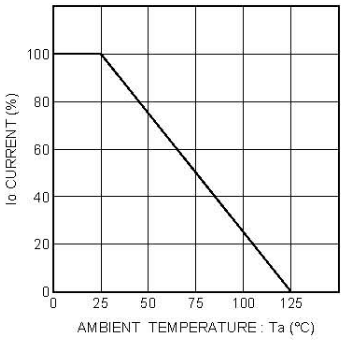

Fig. 4 Derating curve
(mounting on glass epoxy PCBs)