

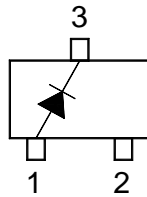
SB420D

SILICON EPITAXIAL PLANAR SCHOTTKY BARRIER DIODE

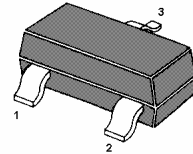
for low power rectification

Features

- Small surface mounting type.
- High reliability.



SOT-23



SOT-23 Plastic Package

Marking

Marking Code: FF

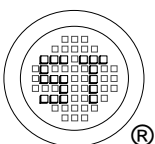
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Maximum Peak Reverse Voltage	V_{RM}	40	V
DC Reverse Voltage	V_R	40	V
Mean Rectifying Current	I_O	0.1	A
Peak Forward Surge Current ¹⁾	I_{FSM}	1	A
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_s	-40 to +125	$^\circ\text{C}$

¹⁾ 60Hz for 1 \varnothing

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

Parameter	Symbol	Min	Typ	Max	Unit
Forward Voltage at $I_F = 10\text{mA}$	V_F	-	-	0.45	V
Reverse Current at $V_R = 10\text{V}$	I_R	-	-	1	μA
Capacitance Between Terminals at $V_R = 10\text{V}$, $f = 1\text{MHz}$	C_T	-	6	-	pF



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



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Certificate No. 0506098

Dated : 21/10/2005

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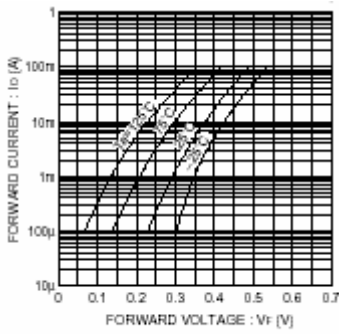


Fig. 1 Forward characteristics

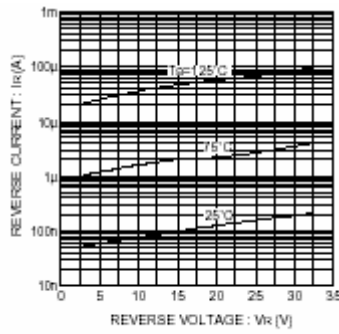


Fig. 2 Reverse characteristics

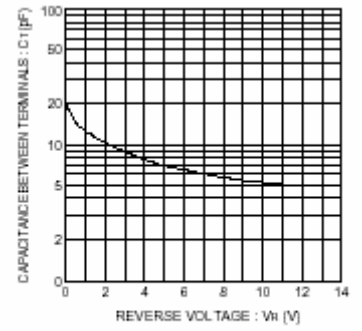


Fig. 3 Capacitance between terminals characteristics

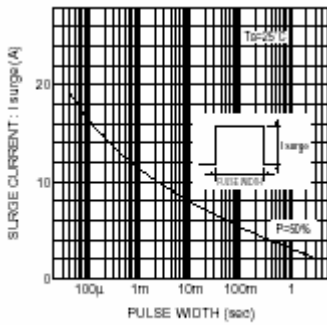


Fig. 4 Surge current characteristics

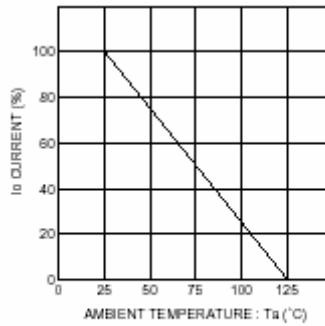
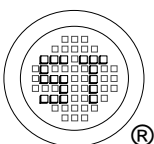


Fig. 5 Derating curve (mounting on glass epoxy PCBs)



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