

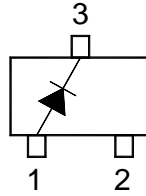
SB491D

SILICON EPITAXIAL PLANAR SCHOTTKY BARRIER DIODE

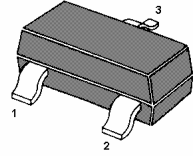
for low power rectification and switching power supply
power supply applications

Feature

- Ultra Low V_F



SOT-23



SOT-23 Plastic Package

Marking

Marking Code: FJ

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

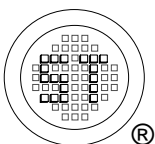
Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	25	V
DC Reverse Voltage	V_R	20	V
DC Forward Current	I_F	1	A
Peak Forward Surge Current ¹⁾	I_{FSM}	3	A
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_s	-40 to +125	$^\circ\text{C}$

¹⁾ 60Hz for 1

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

Parameter	Symbol	Min	Max	Unit
Forward Voltage at $I_F = 1\text{ A}$	V_F	-	0.45	V
Reverse Current at $V_R = 20\text{ V}$	I_R	-	200	μA

Note: ESD sensitive product handling required.



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company
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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7118



ISO 9001:2000
Certificate No. 0506098

Dated : 13/12/2005

● **Electrical characteristic curves (Ta=25°C)**

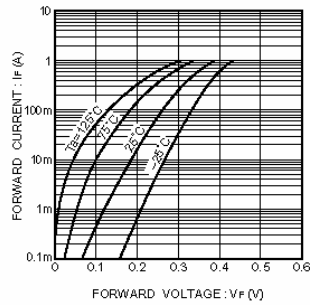


Fig.1 Forward characteristics

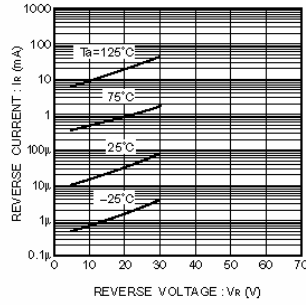


Fig.2 Reverse characteristics

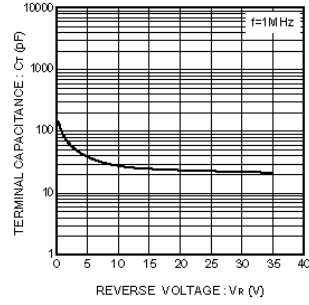


Fig.3 Capacitance between terminals characteristics

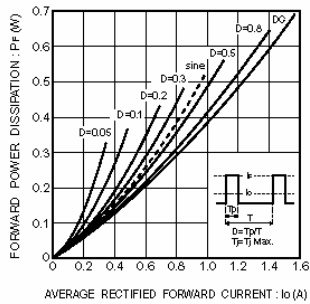


Fig.4 Forward power dissipation characteristics

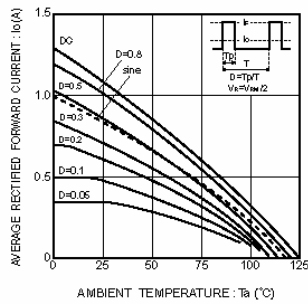
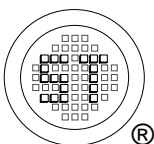
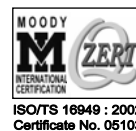


Fig.5 Derating curve (Io - Ta)



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