

SB160W-40

Surface Mount Schottky Barrier Rectifiers

Features

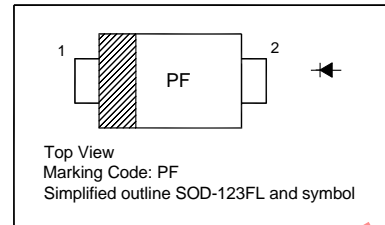
- High reliability
- Low forward voltage

Application

- For switching power supplies
- Battery protection against reversal current

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

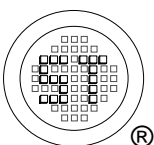


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RM}	40	V
Reverse Voltage	V_R	40	V
Average Rectified Forward Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current (8.3 ms)	I_{FSM}	30	A
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 40 to + 150	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 1\text{ A}$	V_F	0.51	V
Reverse Current at $V_R = 40\text{ V}$	I_R	30	μA



SEMTECH ELECTRONICS LTD.
Subsidiary of Sino-Tech International (BVI) Limited



Dated: 04/07/2013 Rev: 01

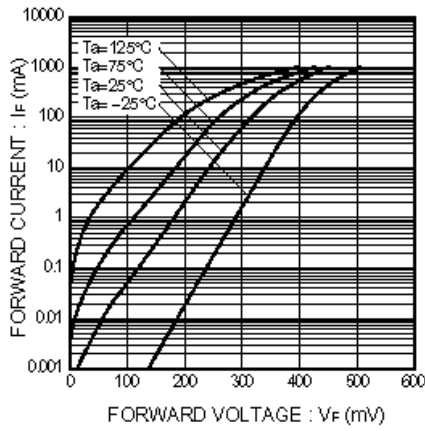


Fig. 1 Forward Temperature Characteristics

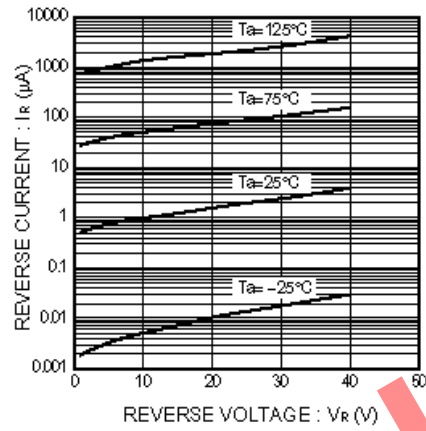


Fig. 2 Reverse Temperature Characteristics

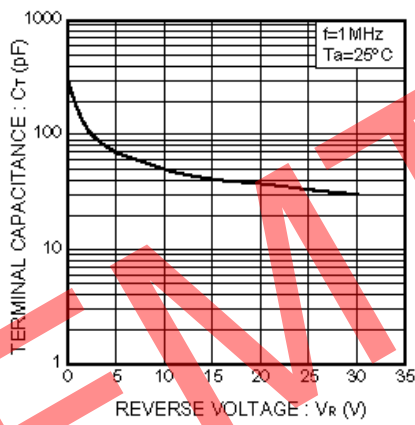


Fig. 3 Capacitance Between Terminals Characteristics

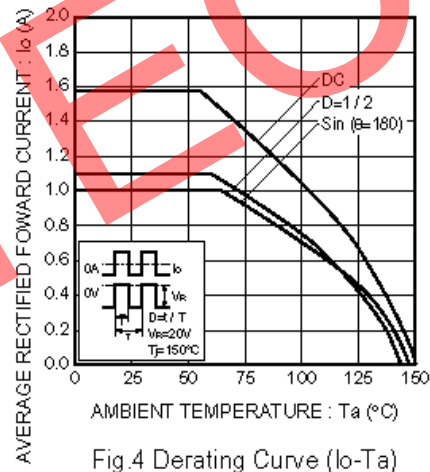
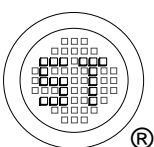


Fig. 4 Derating Curve (I_o - T_a)



SB160W-40

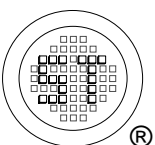
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123FL



UNIT	A	B	C	D	E	F	G	H _E
	1.08	0.1	0.2	2.9	1.9	1.1	0.9	3.9
mm	0.88	0	0.1	2.6	1.7	0.8	0.7	3.5



SEMTECH ELECTRONICS LTD.
Subsidiary of Sino-Tech International (BVI) Limited



Dated: 04/07/2013 Rev: 01