

SB160M-40 Silicon Epitaxial Planar Schottky Barrier Diode

Features

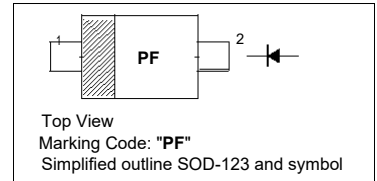
- High reliability
- Low forward voltage

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

Typical Characteristics

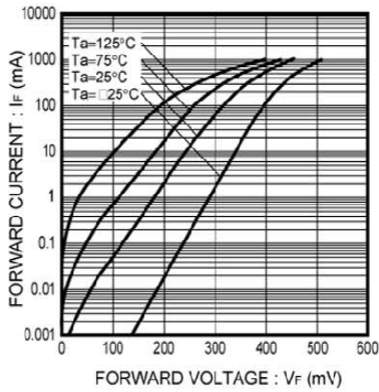


Fig.1 Forward Temperature Characteristics

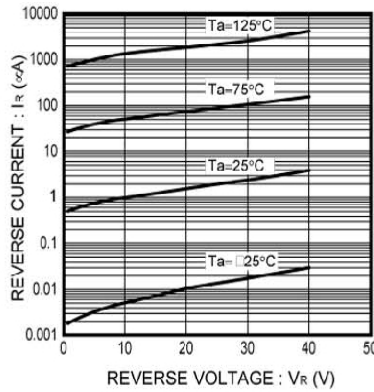


Fig.2 Reverse Temperature Characteristics

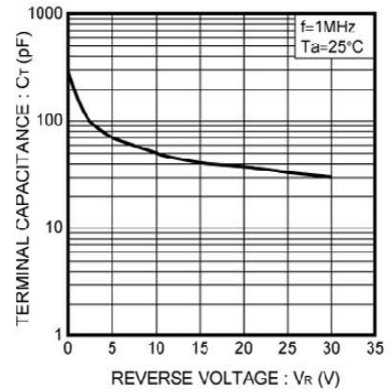


Fig.3 Capacitance Between Terminals Characteristics

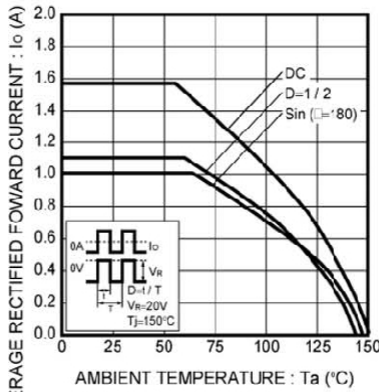


Fig.4 Derating Curve (Io-Ta)

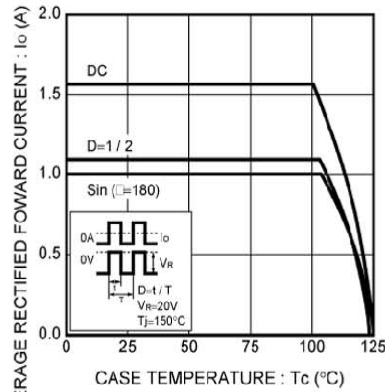


Fig.5 Derating Curve (Io-Tc)

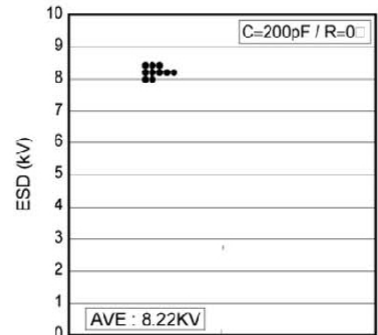
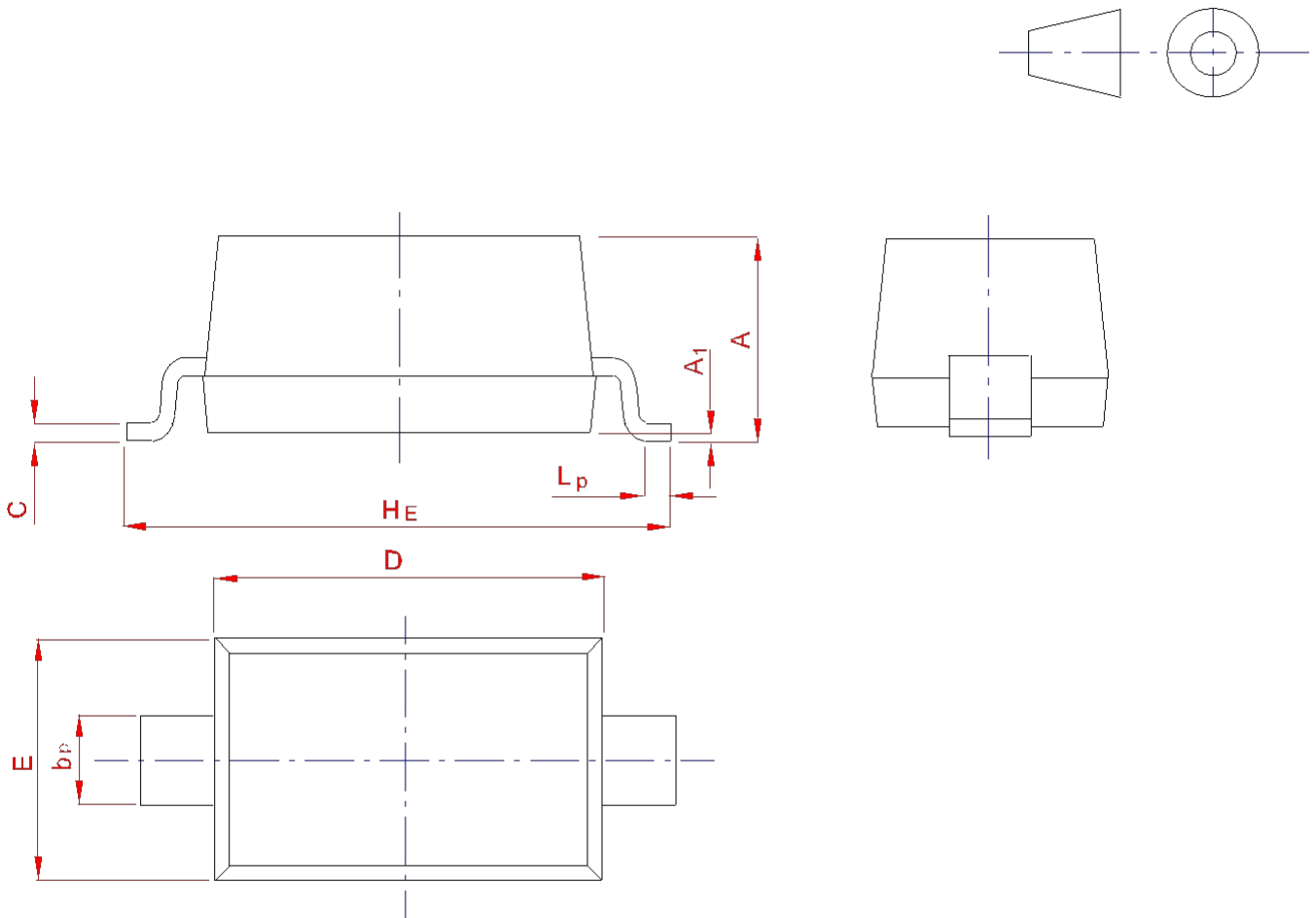


Fig.6 ESD

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	bp	C	D	E	HE	A1	Lp
mm	1.20	0.60	0.135	2.75	1.65	3.85	0.10	0.50
	0.90	0.50	0.100	2.55	1.55	3.55	0.01	0.20