

SB160FW-30

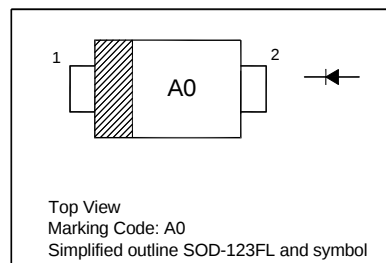
Surface Mount Schottky Barrier Rectifier

Features

- Low reverse current
- High reliability
- Low forward voltage drop

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}	30	V
Reverse Voltage	V_R	30	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	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 40 to + 125	$^\circ\text{C}$

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

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 0.5\text{ A}$ at $I_F = 1\text{ A}$	V_F	0.46 0.48	V
Reverse Current at $V_R = 15\text{ V}$ at $V_R = 30\text{ V}$	I_R	20 50	μA
Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	264 Typ.	pF

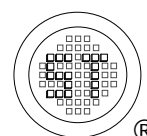


Fig 1. Reverse Current VS Reverse Voltage

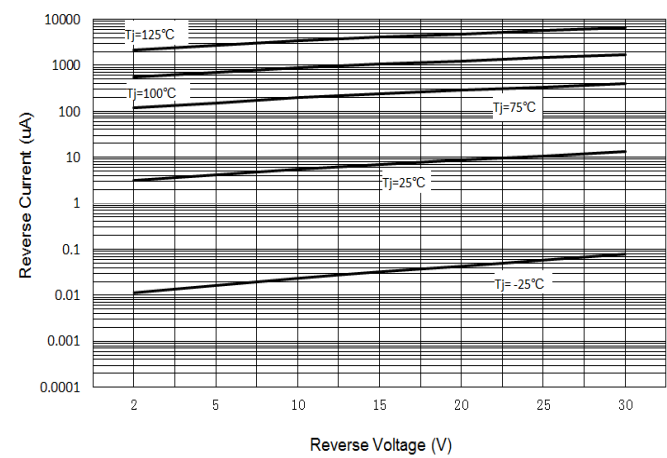


Fig 2. Forward Current VS Forward Voltage

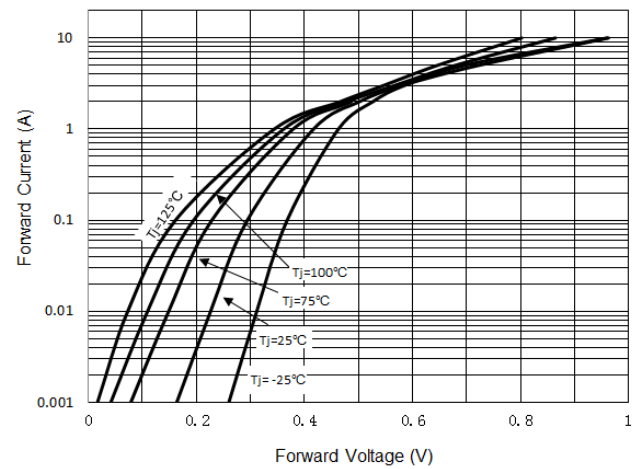


Fig 3. Junction Capacitance

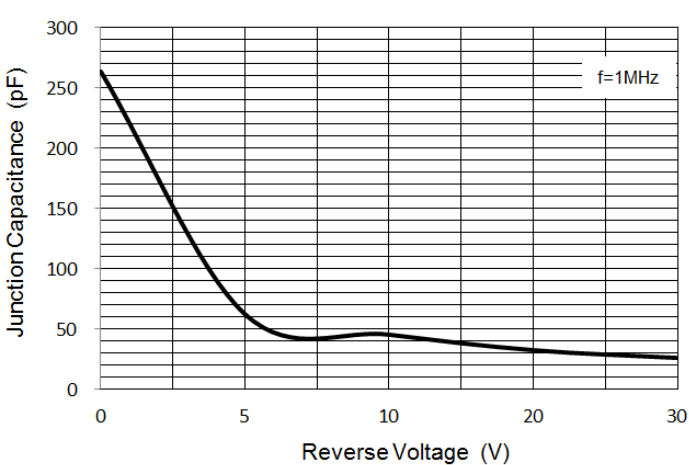
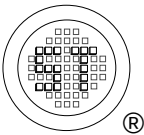
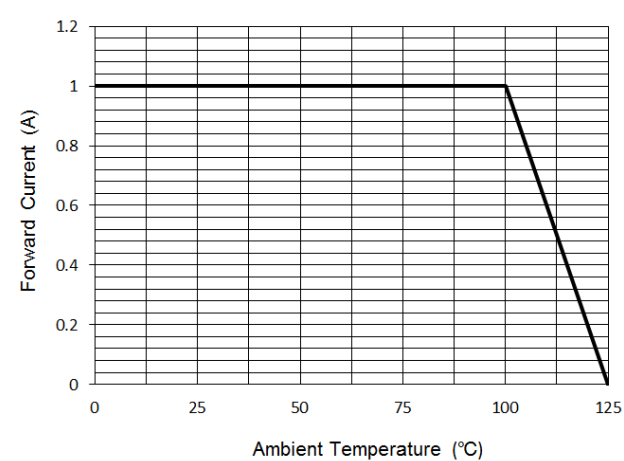


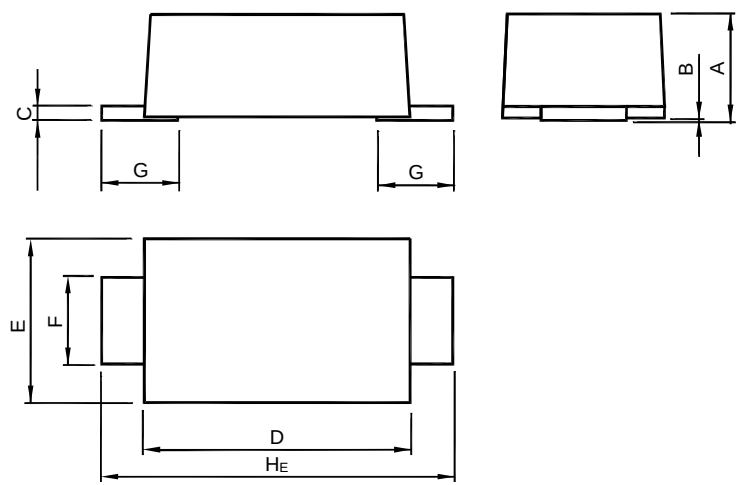
Fig 4. Forward Current Derating Curve



PACKAGE OUTLINE

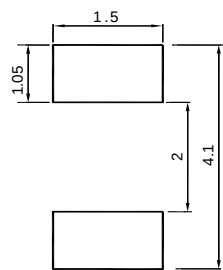
Plastic surface mounted package; 2 leads

SOD-123FL



UNIT	A	B	C	D	E	F	G	H _E
mm	1.08 0.88	0.1 0	0.2 0.1	2.9 2.7	1.9 1.7	1.1 0.8	0.85 0.45	3.9 3.5

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-123FL	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" III " = Cathode line
" A0 " = Part No.
Font type: Arial

