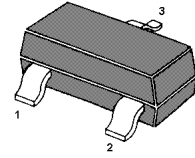
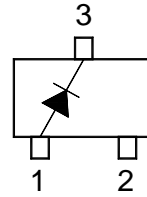


SB420D

Silicon Epitaxial Planar Schottky Barrier Diode

Features

- Small surface mounting type
- High reliability
- Low forward voltage drop
- Fast switching
- Ultra-small surface mount package



1. Anode 2. Cathode 3.NC
SOT-23 Plastic Package

Applications

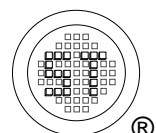
- Low Power Rectification

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
Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Peak Forward Surge Current	I_{FSM}	1	A
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-40 to +125	$^\circ\text{C}$

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

Parameter	Symbol	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



SB420D

Electrical Characteristics Curves

Fig 1. Reverse Characteristics Curves

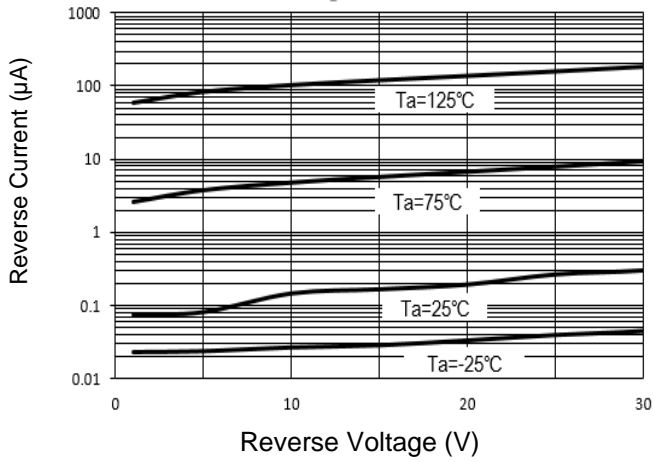


Fig 2. Forward Characteristics Curves

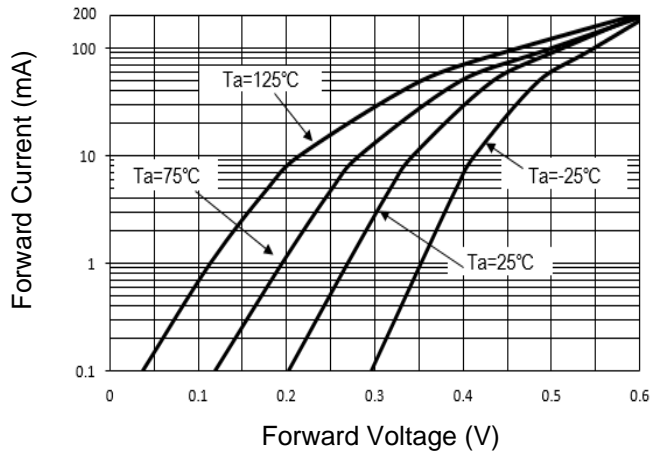


Fig 3. Junction Capacitance

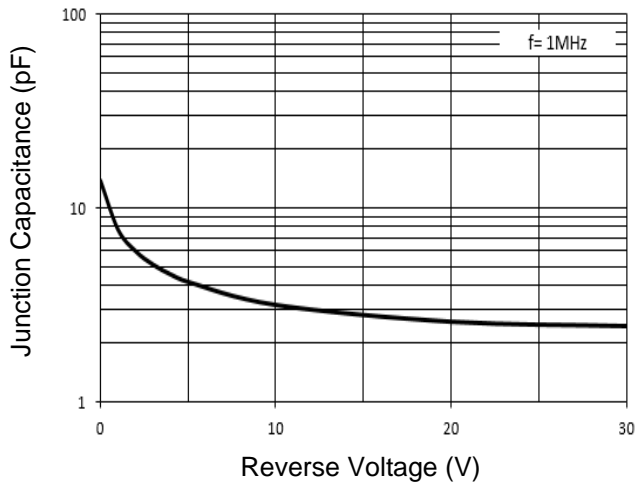
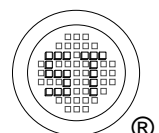
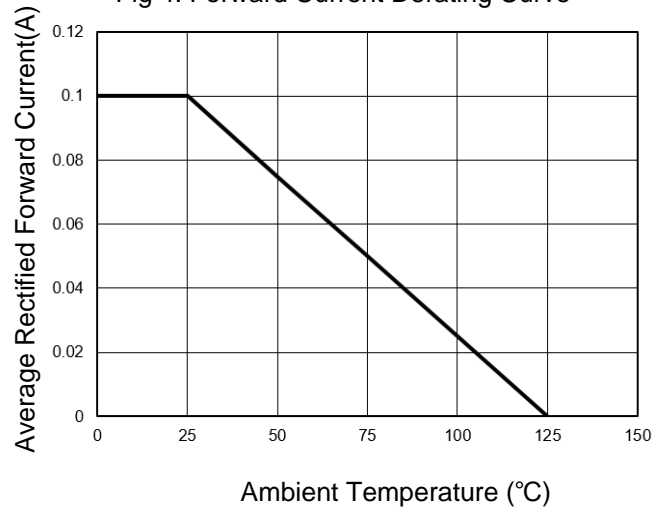


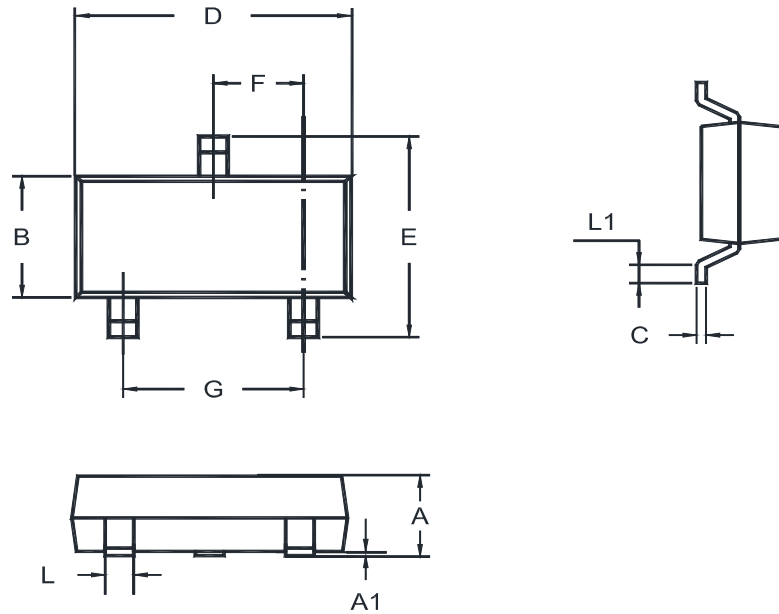
Fig 4. Forward Current Derating Curve



SB420D

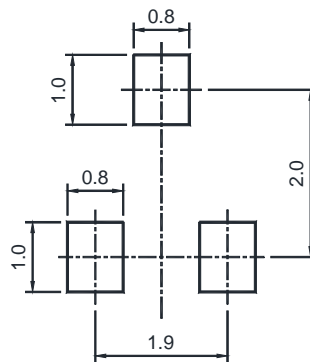
Package Outline (Dimensions in mm)

SOT-23



Unit	A	A1	B	C	D	E	F	G	L	L1
mm	1.20	0.100	1.40	0.19	3.04	2.6	1.02	2.04	0.51	0.2
	0.89	0.013	1.20	0.08	2.80	2.2	0.89	1.78	0.37	MIN

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-23	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

- "FF" = Part No.
- "YM" = Date Code Marking
- "Y" = Year
- "M" = Month
- Font type: Arial

