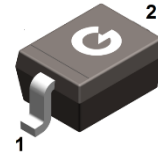


Features

- Low voltage
- Low inductance
- For power supply
- High current rectifier schottky diode
- For detection and step-up-conversion
- RoHS compliant with Halogen-free

HF



SOD-323

Mechanical Data

- Case: SOD-323
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Tin-plated; solderability per MIL-STD-202, Method 208

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
BAT60B	SOD-323	3000 pcs / Tape & Reel	W5•

Maximum Ratings (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V _{RM}	10	V
DC Reverse Voltage	V _R	10	V
Peak Forward Current, δ = 0.11	I _F	3	A
Peak Forward Surge Current (8.3ms single half sine-wave)	I _{FSM}	5	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation (T _A = 25°C)	P _D	0.35	W
Thermal Resistance Junction-to-Air ^{*1}	R _{θJA}	250	°C/W
Thermal Resistance Junction-to-Case ^{*1}	R _{θJC}	180	°C/W
Thermal Resistance Junction-to-Lead ^{*1}	R _{θJL}	190	°C/W
Operating Junction Temperature	T _J	-55 ~ +150	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

Note 1: The data tested by surface mounted on a 1 inch² FR-4 board with 2OZ copper

Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R = 10\mu\text{A}$	10	-	-	V
Forward Voltage	V_F	$I_F = 10\text{mA}$	0.20	-	0.3	V
		$I_F = 100\text{mA}$	0.26	-	0.38	V
		$I_F = 500\text{mA}$	0.32	-	0.5	V
		$I_F = 1000\text{mA}$	0.36	-	0.6	V
Maximum Peak Reverse Current *1	I_R	$V_R = 5\text{V}$	-	-	15	μA
		$V_R = 8\text{V}$	-	-	25	μA
Diode capacitance	C_J	$V_R = 5\text{V}, f = 1\text{MHz}$	-	38	-	pF

Ratings and Characteristic Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

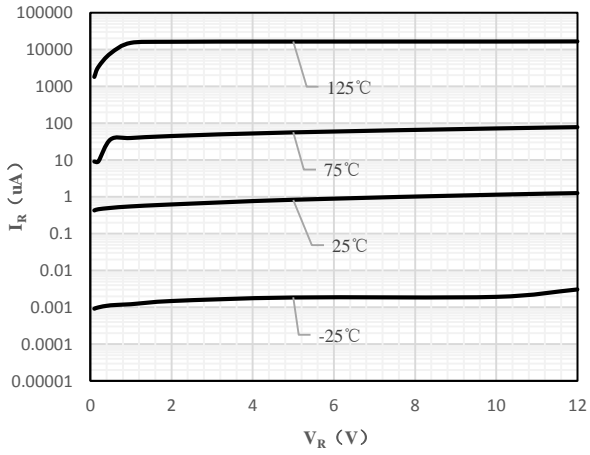


Fig 1 Typical Reverse Characteristic

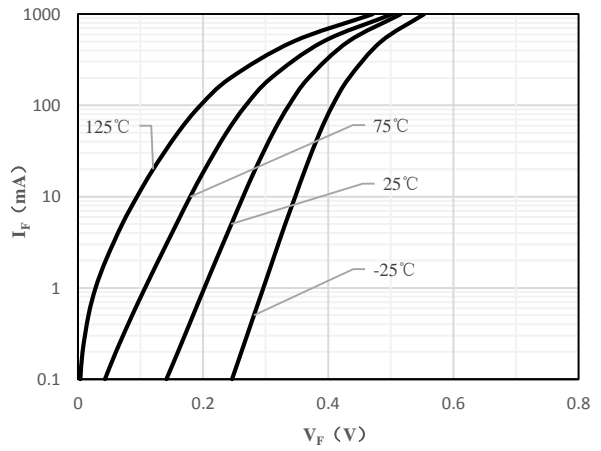


Fig 2 Typical Forward Characteristics

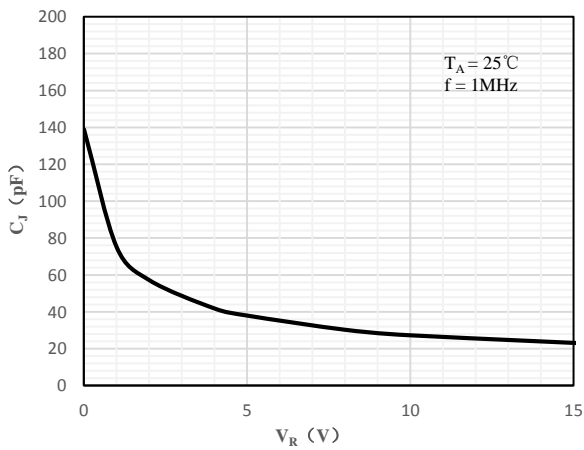


Fig 3 Capacitance Characteristics

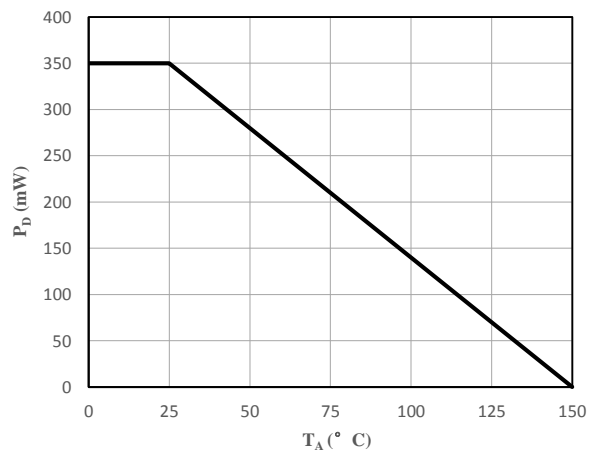
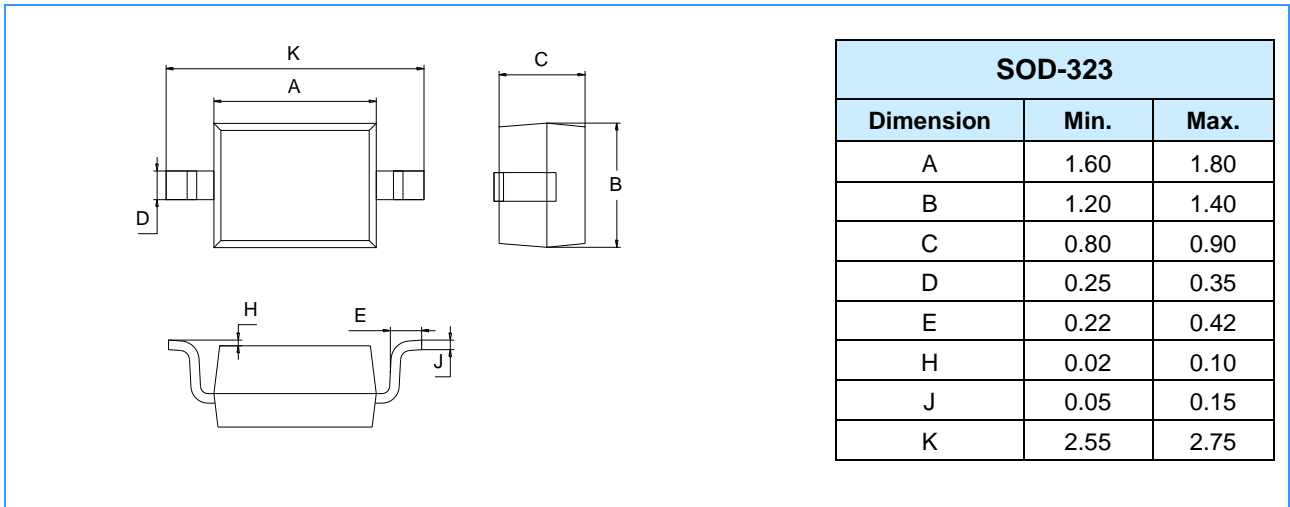


Fig 4 Power Derating Curve

Package Outline Dimensions (Unit: mm)



Mounting Pad Layout (Unit: mm)

