

SDB05150HB

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 150 V

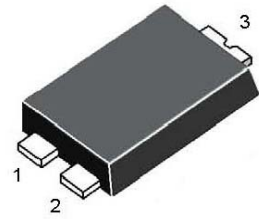
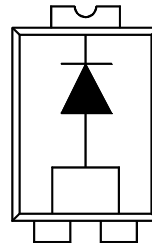
Forward Current - 5 A

Features

- Low forward voltage
- Low power loss/ High efficiency

Applications

- DC/DC converters



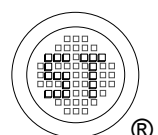
1.Anode 2.Anode 3.Cathode
TO-277 Plastic Package

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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	150	V
Average Forward Rectified Current	$I_{F(AV)}$	5	A
Non-Repetitive Peak Forward Surge Current ($t = 8.3 \text{ ms}$)	I_{FSM}	150	A
Typical Thermal Resistance Per Diode	$R_{\theta JC}$	2.4	$^\circ\text{C/W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 40 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 50 \mu\text{A}$	V_{BR}	150	-	V
Forward Voltage at $I_F = 5 \text{ A}$	V_F	-	0.84	V
Reverse Current at $V_R = 150 \text{ V}$	I_R	-	50	μA



Electrical characteristic curves

Fig 1. Reverse Characteristics

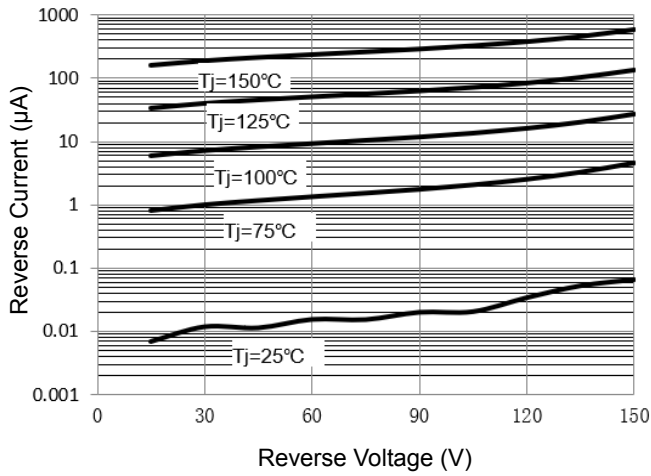


Fig 2. Forward Characteristics

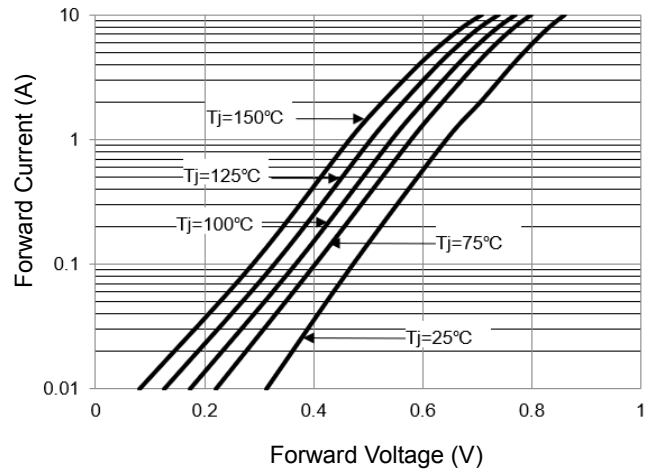


Fig 3. Junction Capacitance

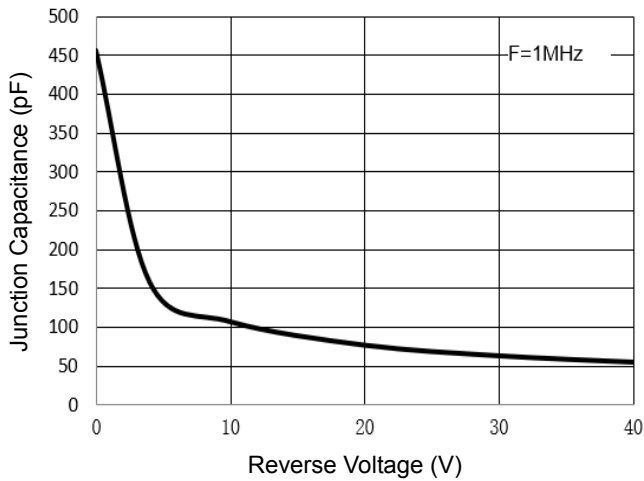


Fig 4. Thermal Resistance

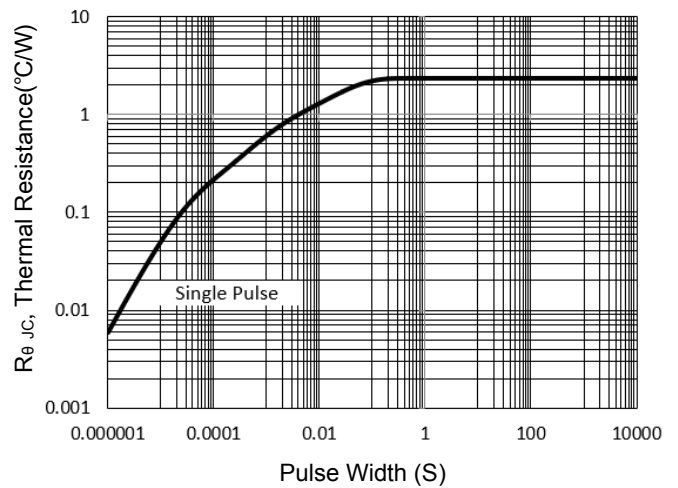
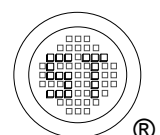
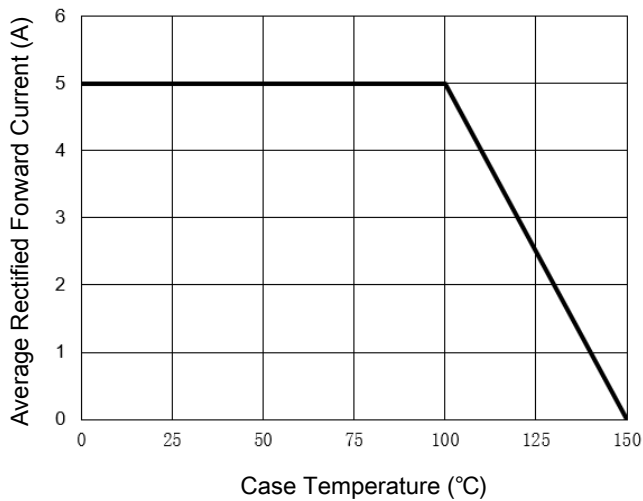


Fig 5. Forward Current Derating Curve

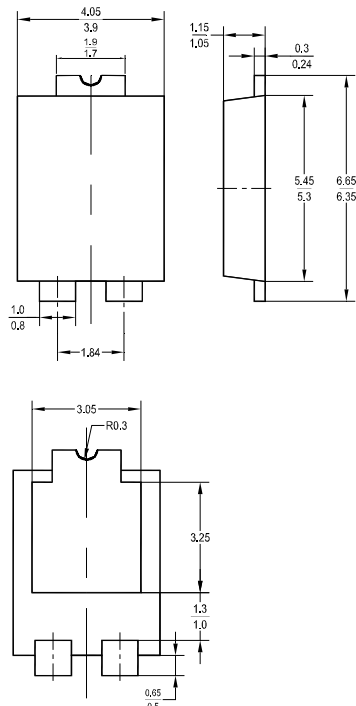


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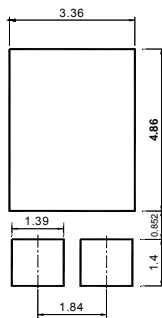
PACKAGE OUTLINE

Plastic surface mounted package (Units: mm)

TO-277



Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
TO-277	12	8 ± 0.1	0.315 ± 0.004	330	13	5,000

Marking information

" SDB05150HB " = Part No.

" YYWW " = Date Code Marking

" Y " = Year (ex: 19 = 2019)

" W " = Week (ex: 09 = the 9th week of the year)

Font type: Arial

