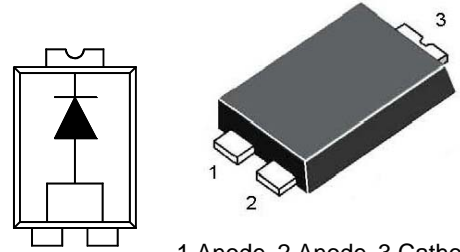# SDB0845HB

Surface Mount Schottky Barrier Rectifier
Reverse Voltage - 45 V
Forward Current - 8 A

Features
• Low forward voltage drop

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

Absolute Maximum Ratings (T_a = 25℃)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Reverse Voltage	V_R	45	V
Average Rectified Forward Current	$I_{F(AV)}$	8	A
Non-repetitive Peak Forward Surge Current (t = 8.3 ms)	I_{FSM}	180	A
Typical Thermal Resistance, Junction to Case [1]	$R_{\theta JC}$	8	℃/W
Typical Thermal Resistance, Junction to Ambient [1]	$R_{\theta JA}$	102	℃/W
Typical Thermal Resistance, Junction to Ambient [2]	$R_{\theta JA}$	60	℃/W
Operating Temperature Range	T_J	- 65 to + 150	℃
Storage Temperature Range	T_{stg}	- 65 to + 175	℃

Characteristics at T_a = 25℃

Parameter	Symbol	Max.	Unit

Forward Voltage
  at I_F = 8 A
  at I_F = 8 A ,T_J = 125℃
	V_F	0.6
		0.57
			V

Reverse Current [3]
  at V_R = 45 V
  at V_R = 45 V, T_J = 125℃
	I_R	0.3
		75
			mA

[1] FR-4 PCB, 2oz. Copper, minimum recommended pad layout.

[2] Polymide PCB, 2oz. Copper, minimum recommended pad layout.

[3] Short duration pulse test used to minimize self-heating effect.

SDB0845HB

Electrical characteristic curves
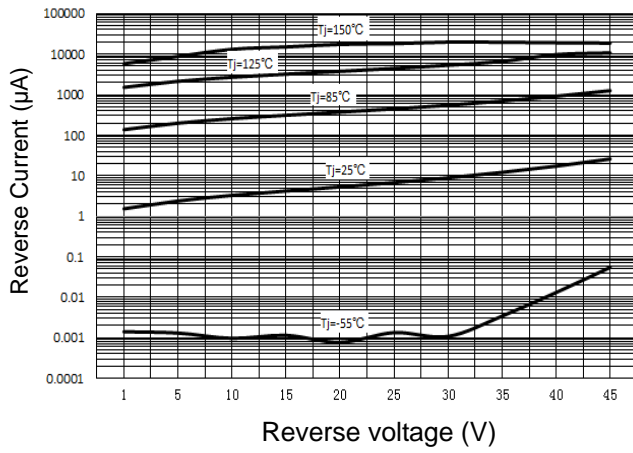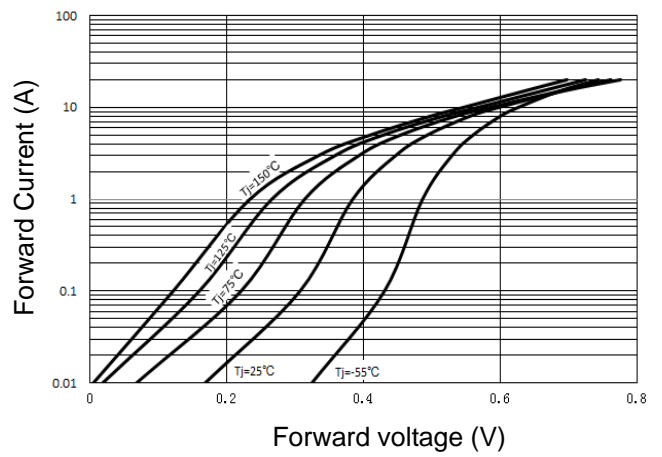
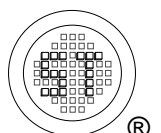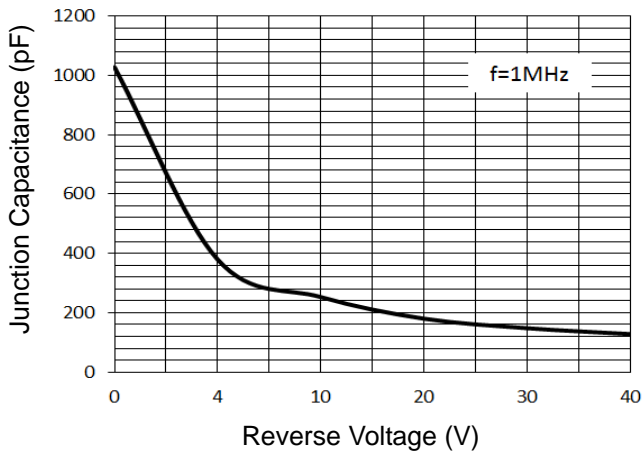Fig 1. Reverse Characteristic Curve
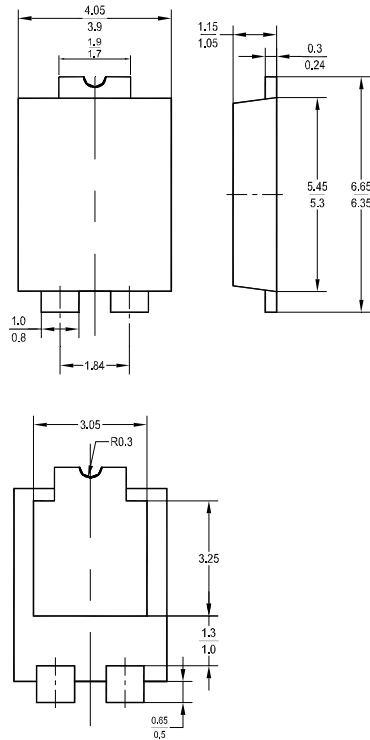

Fig 2. Forward Characteristic Curve

Fig 3. Junction Capacitance
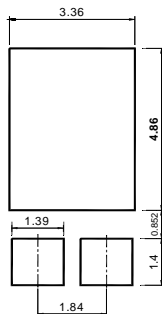
SDB0845HB

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

" ******** " = Part No.
" YYWW " = Date Code Marking
 " Y " = Year (ex: 19 = 2019)
 " W " = Week (ex: 09 = the 9th week of the year)
Font type: Arial