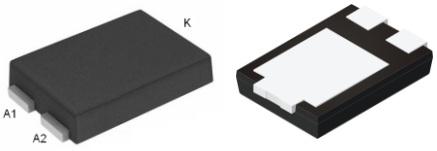
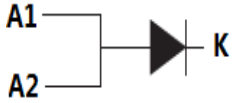
Main Product Characteristics:

IF	15A
VRRM	50V
T_j(max)	150℃
Vf(max)	0.52V



TO-277

SSBD15L50H



Schematic Diagram

Features and Benefits:

- High Junction Temperature
- High ESD Protection
- High Forward & Reverse Surge capability

Description:

Schottky Barrier Rectifier designed for high frequency switch model power supplies such as adaptors and DC/DC convertors; this product special design for high forward and reverse surge capability.

Absolute Rating:

Symbol	Characterizes	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	50	V
$V_{R(RMS)}$	RMS Reverse Voltage	35	V
$I_{F(AV)}$	Average Forward Current	15	A
I_{FSM}	Non Repetitive Surge Forward Current(tp=8.3ms sinusoidal)	200	A
I_{RRM}	Peak Repetitive Reverse Surge Current(Tp=2us)	2	A
T_J	Maximum operation Junction Temperature Range	-55~150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

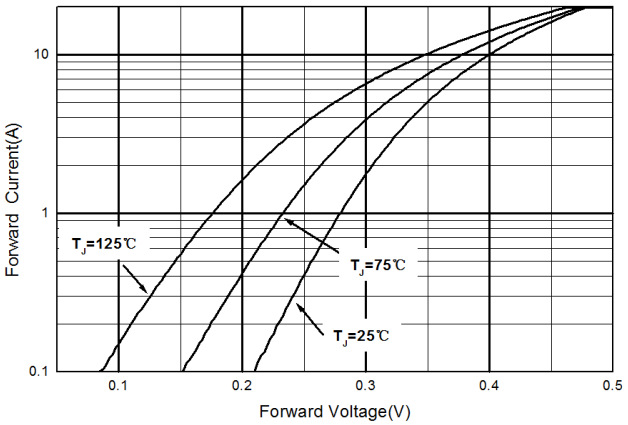
Thermal Resistance

Symbol	Characterizes	Value	Unit
$R_{\theta JC}$	Maximum Thermal Resistance Junction To Case (per leg)	4	℃/W

Electrical Characterizes @T_A=25℃ unless otherwise specified

Symbol	Characterizes	Min	Typ	Max	Unit	Test Condition
V_R	Reverse Breakdown Voltage	50			V	I_R=0.5mA
V_F	Forward Voltage Drop		0.45	0.52	V	I_F=15A, T_J=25℃
			0.4	0.47		I_F=15A, T_J=125℃
I_R	Leakage Current			0.2	mA	V_R=50V, T_J=25℃
				50		V_R=50V, T_J=125℃

I-V Curves:



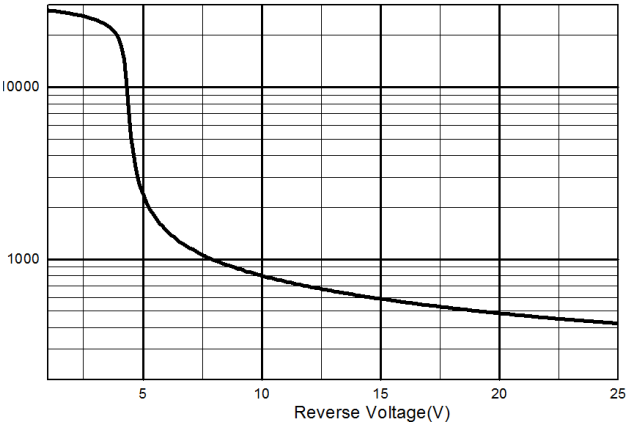


Figure 1：Typical Forward Characteristics

Figure 2：Typical Capacitance Characteristics

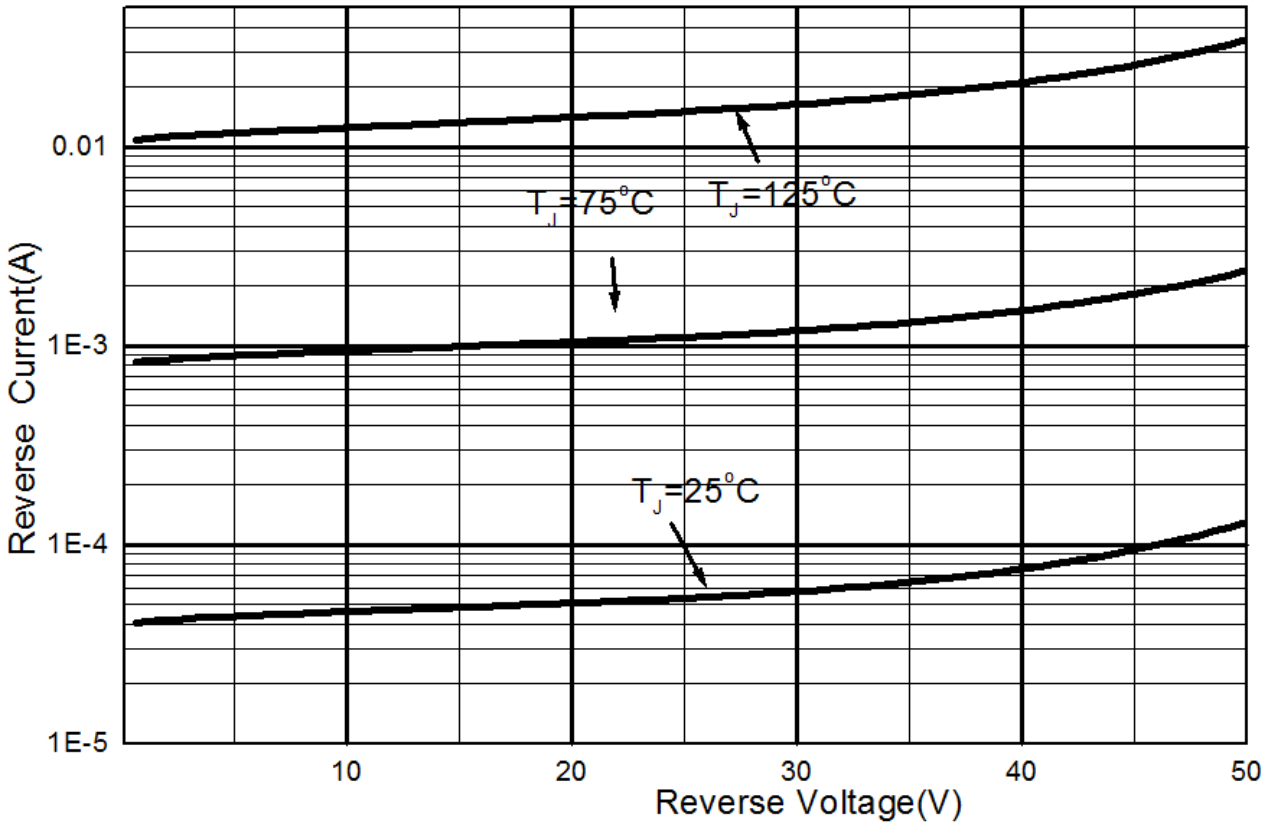
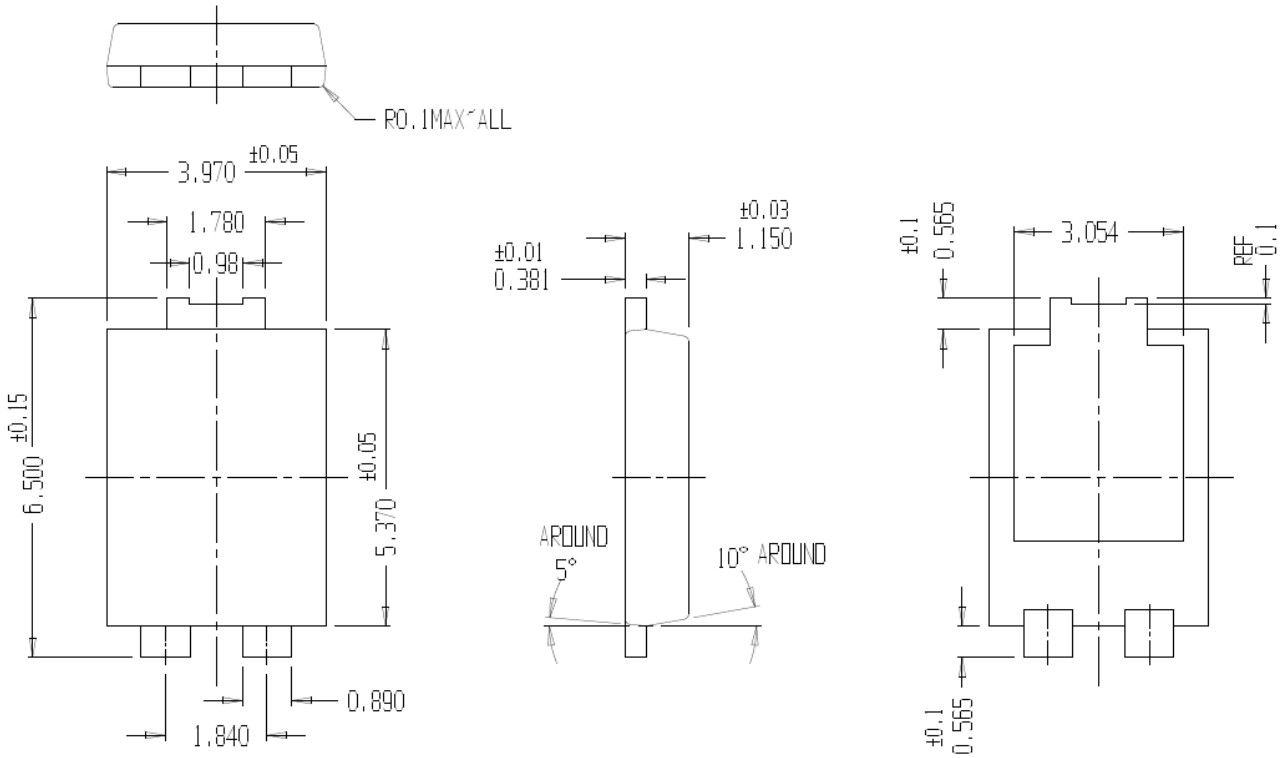


Figure 3：Typical Reverse Characteristics

Mechanical Data：

TO-277 package outline dimension

Unit(mm):



Ordering and Marking Information

Device Marking: SSBD15L50H

Package (Available)
TO-277
Operating Temperature Range
C : -55 to 150 ºC

Devices per Unit

Package Type	Units/ Tube	Tubes/ Inner Box	Units/Inner Box	Inner Boxes/Carton Box	Units/ Carton Box
TO-277	3000	2	6000	6	36000

Reliability Test Program

Test Item	Conditions	Duration	Sample Size
High Temperature Reverse Bias(HTRB)	**Tj=125℃ to 150℃ @ 80% of Max VDSS/VCES/VR**	**168 hours 500 hours 1000 hours**	**3 lots x 77 devices**

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