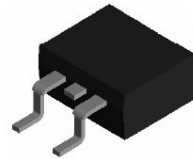


### Main Product Characteristics:

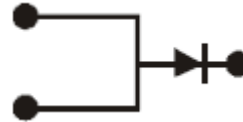
IF	10A
VRRM	45V
Tj(max)	150C
Vf(max)	0.55V



TO252  
SSBD1045D

### 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 <sub>RRM</sub>	Peak Repetitive Reverse Voltage		45	V
V <sub>R(RMS)</sub>	RMS Reverse Voltage		31	V
I <sub>F(AV)</sub>	Average Forward Current	Per diode	10	A
I <sub>FSM</sub>	Non Repetitive Surge Forward Current(tp=8.3ms sinusoidal)		150	A
I <sub>RRM</sub>	Peak Repetitive Reverse Surge Current(Tp=2us/1KHZ)		2	A
T <sub>J</sub>	Maximum operation Junction Temperature Range		-50~150	°C
T <sub>stg</sub>	Storage Temperature Range		-50~150	°C

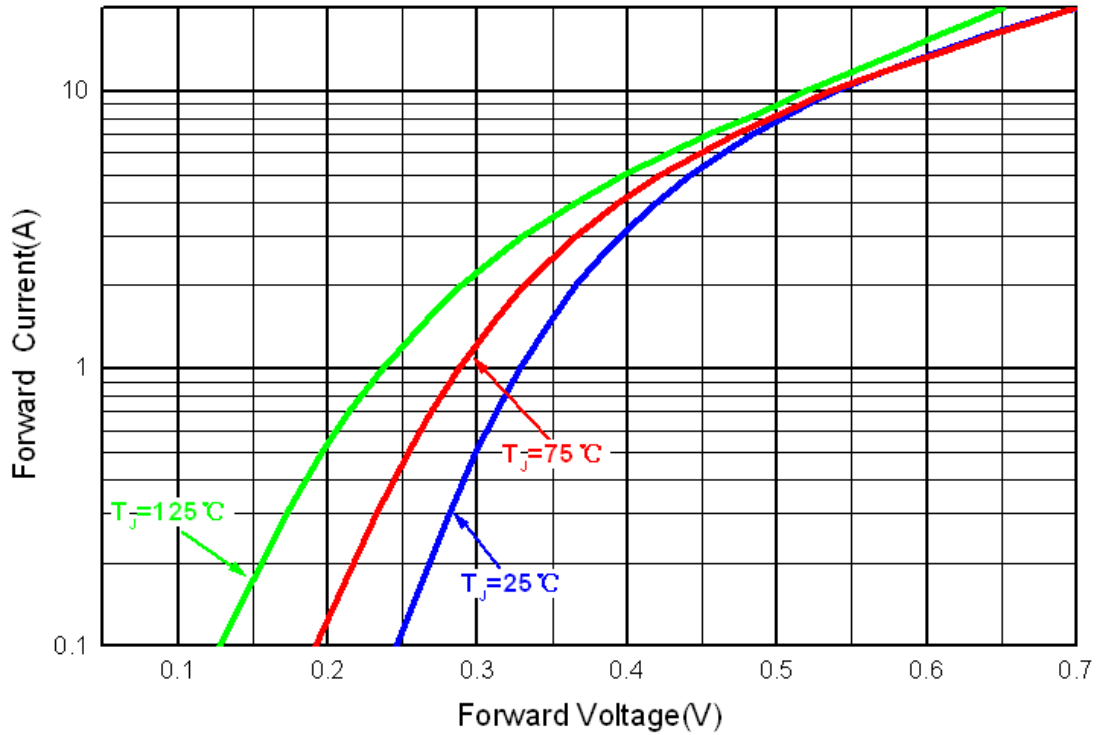
### Thermal Resistance

Symbol	Characterizes		Value	Unit
R <sub>θJC</sub>	Maximum Thermal Resistance Junction To	TO220	2	°C/W
R <sub>θJC</sub>	Case	TO220F	4	°C/W

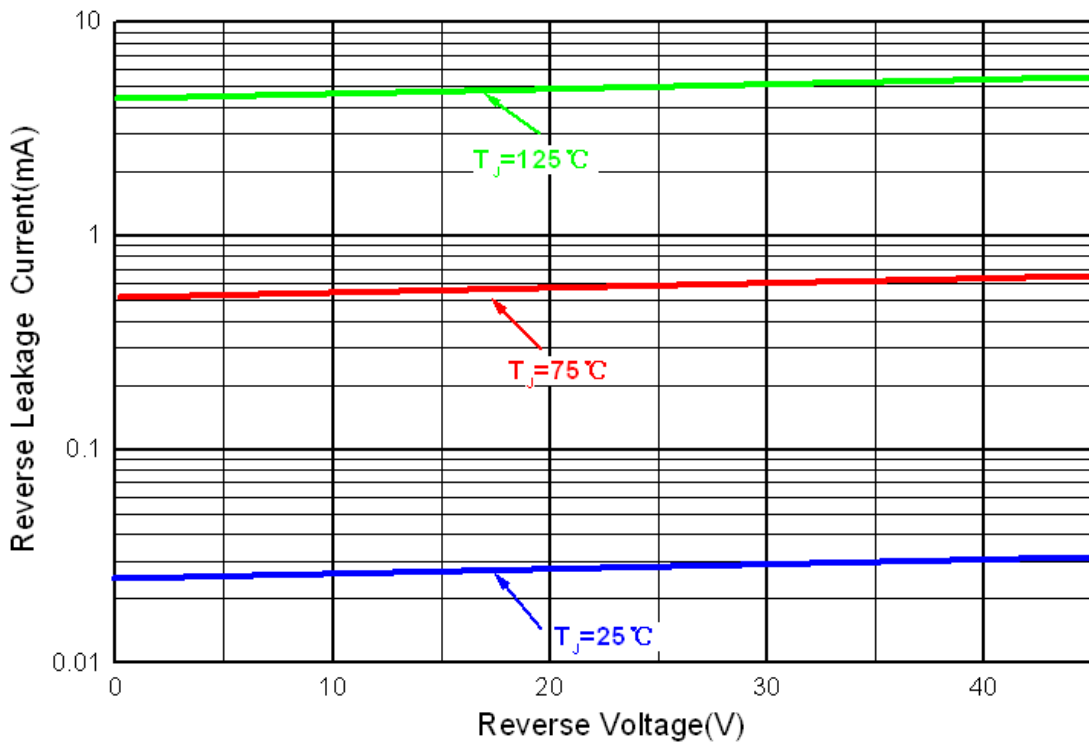
### Electrical Characterizes @T<sub>A</sub>=25°C unless otherwise specified

Symbol	Characterizes	Min	Typ	Max	Unit	Test Condition
V <sub>R</sub>	Reverse Breakdown Voltage	45			V	I <sub>R</sub> =0.5mA
V <sub>F</sub>	Forward Voltage Drop			0.55	V	I <sub>F</sub> =10A, T <sub>J</sub> =25°C
				0.5		I <sub>F</sub> =10A, T <sub>J</sub> =125°C
I <sub>R</sub>	Leakage Current			0.1	mA	V <sub>R</sub> =45V, T <sub>J</sub> =25°C
				10		V <sub>R</sub> =45V, T <sub>J</sub> =125°C

### I-V Curves;



**Figure 1: Typical Forward Characteristics**



**Figure 2: Typical Reverse Characteristics**