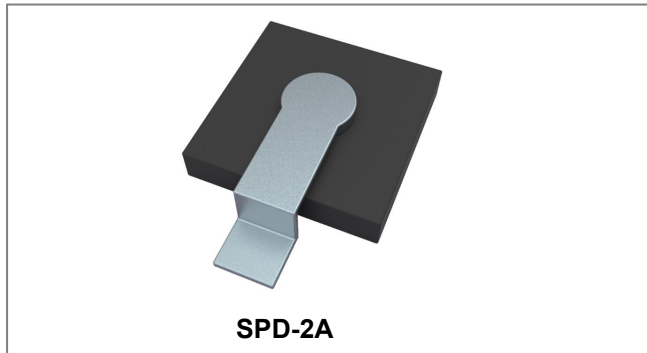


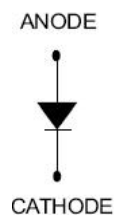
## 65SPB015/A Power Surface Mount Schottky Rectifier



### Features

- 100 °C T<sub>J</sub> operation
- Low forward voltage drop
- High surge capacities
- High frequency operation
- Guaranteed reverse avalanche capability
- Low profile surface mount package
- Baseplate: Pure Sn plated; Terminals: Pure Sn plated
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

### Schematic & Pin Configuration



### Applications

- Switching power supply
- Redundant power subsystems
- Reverse battery protection
- Converters
- Many other high current AC/DC power supplies

### Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	-	15	V
Average Rectified Forward Current	$I_{F(AV)}$	50% duty cycle @T <sub>C</sub> = 116°C, rectangular wave form	60	A
Peak One Cycle Non-Repetitive Surge Current	$I_{FSM}$	8.3 ms, half Sine pulse	860	A

**Electrical Characteristics:**

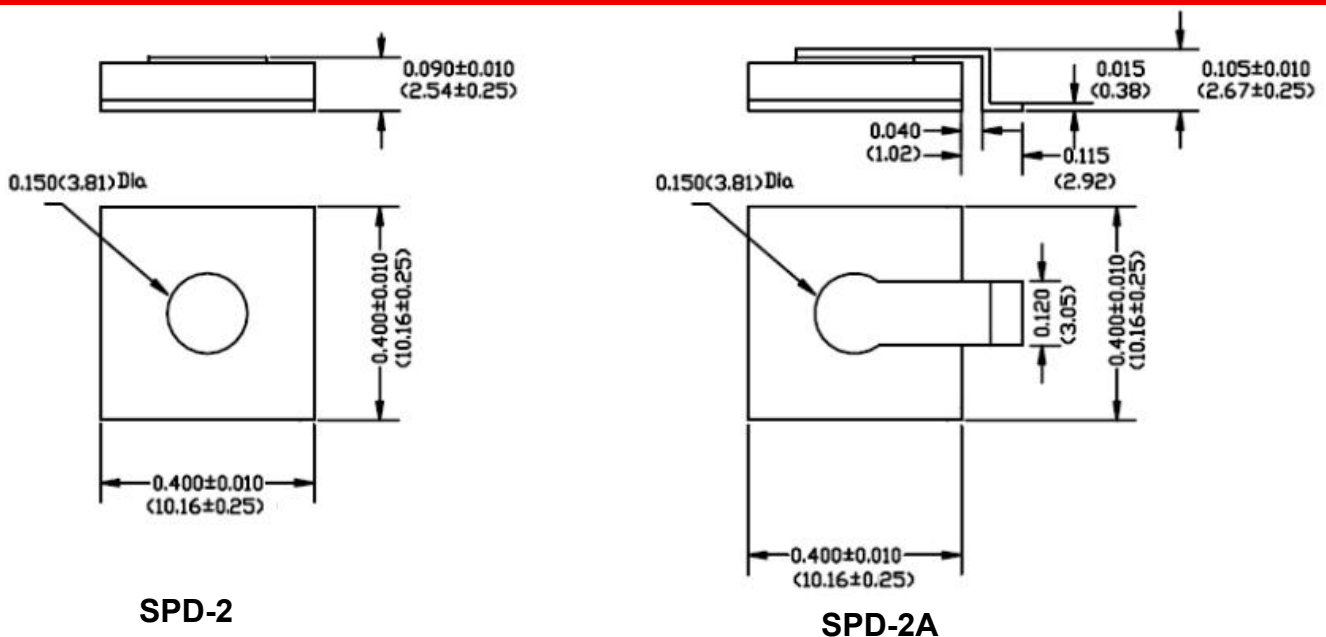
Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop *	V <sub>F1</sub>	@ 60A, Pulse, T <sub>J</sub> = 25 °C	-	0.41	V
	V <sub>F2</sub>	@ 60A, Pulse, T <sub>J</sub> = 75 °C	-	0.37	V
Reverse Current*	I <sub>R1</sub>	@V <sub>R</sub> = rated V <sub>R</sub> , Pulse, T <sub>J</sub> = 25 °C	5	20	mA
	I <sub>R2</sub>	@V <sub>R</sub> = rated V <sub>R</sub> , Pulse, T <sub>J</sub> = 100 °C	500	1000	mA
Junction Capacitance	C <sub>T</sub>	@V <sub>R</sub> = 5V, T <sub>C</sub> = 25 °C f <sub>SIG</sub> = 1MHz	3300	3600	pF
Voltage Rate of Change	dv/dt	-	-	10,000	V/μs

\* Pulse width < 300 μs, duty cycle < 2%

**Thermal-Mechanical Specifications:**

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T <sub>J</sub>	-	-55 to +125	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +100	°C
Typical Thermal Resistance Junction to Case	R <sub>θJC</sub>	DC operation	0.37	°C/W
Approximate Weight	wt	-	1.1	g

**Mechanical Dimensions (Inches/Millimeters)**

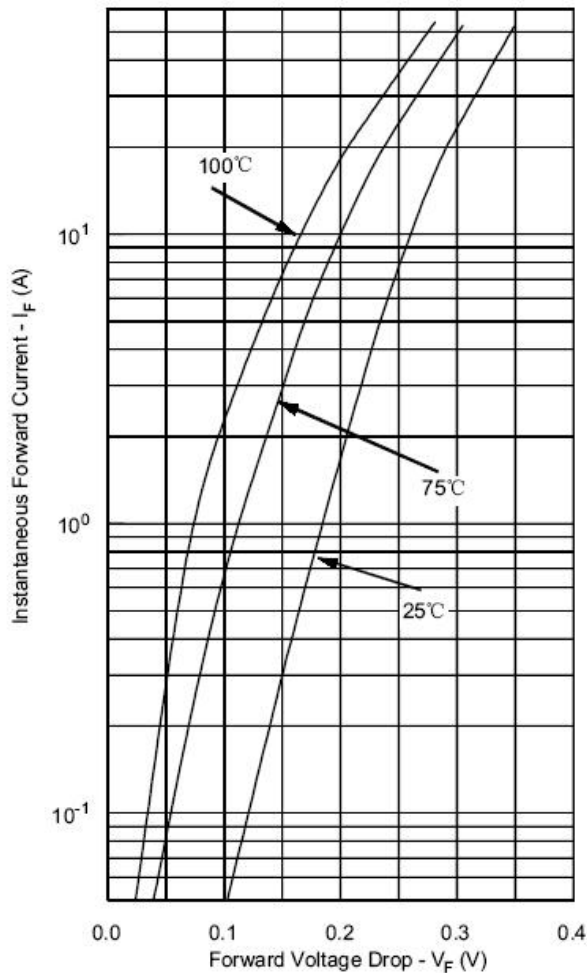


Suffix "R" Denotes Reversed Polarity

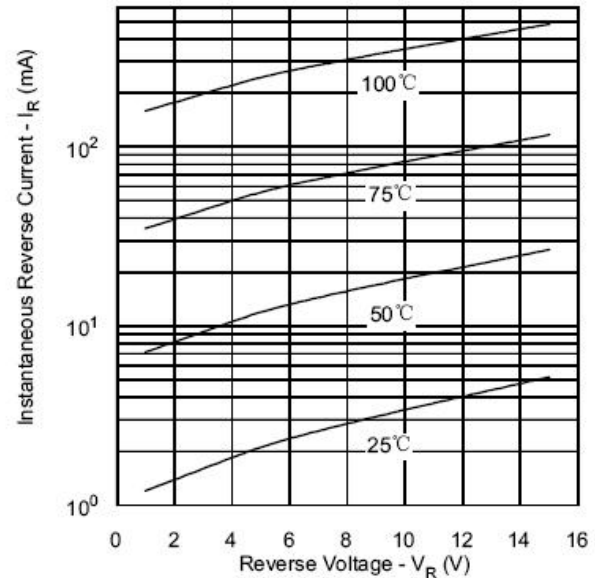
- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - [sales@smc-diodes.com](mailto:sales@smc-diodes.com) •

**Ratings and Characteristics Curves**

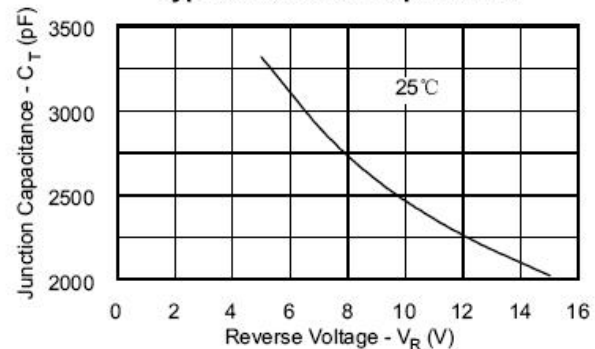
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



**Ordering Information**

Device	Package	Shipping
65SPB015(A)	SPD-2A(Pb-Free)	100pcs/ box

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

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