

65SPB015/A Power Surface Mount Schottky Rectifier



Features

- 100 °C T_J operation
- Low forward voltage drop
- High surge capacities
- High frequency operation
- Guaranteed reverse avalanche capability
- Low profile surface mount package
- 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 _C =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:

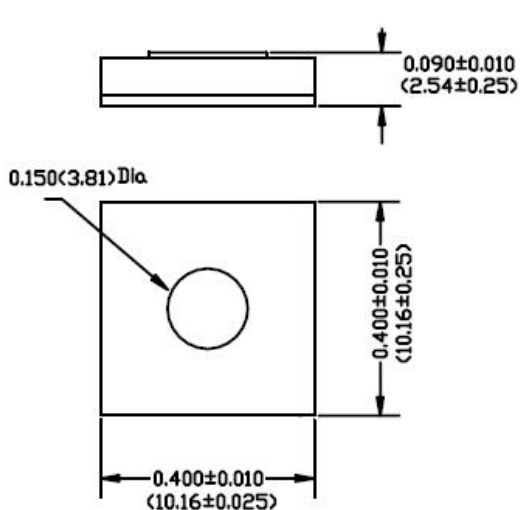
Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop *	V _{F1}	@ 60A, Pulse, T _J = 25 °C	-	0.41	V
	V _{F2}	@ 60A, Pulse, T _J = 75 °C	-	0.37	V
Reverse Current*	I _{R1}	@V _R = rated V _R , Pulse, T _J = 25 °C	5	20	mA
	I _{R2}	@V _R = rated V _R , Pulse, T _J = 100 °C	500	1000	mA
Junction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

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

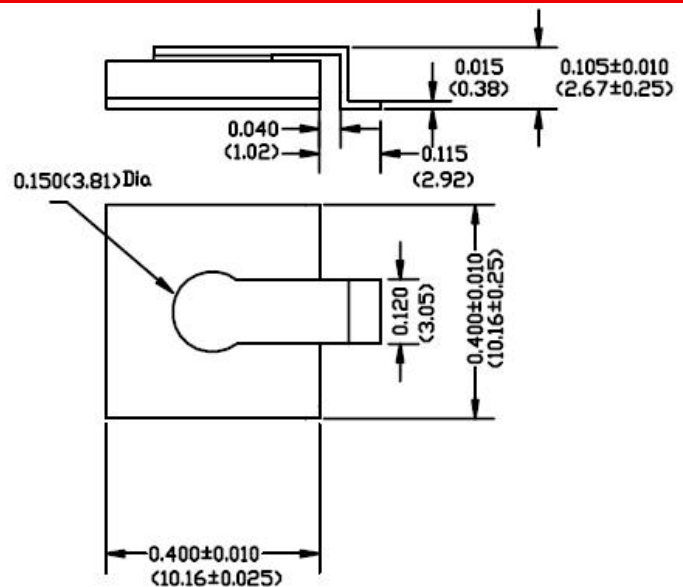
Thermal-Mechanical Specifications:

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

Mechanical Dimensions (Inches/Millimeters)



SPD-2



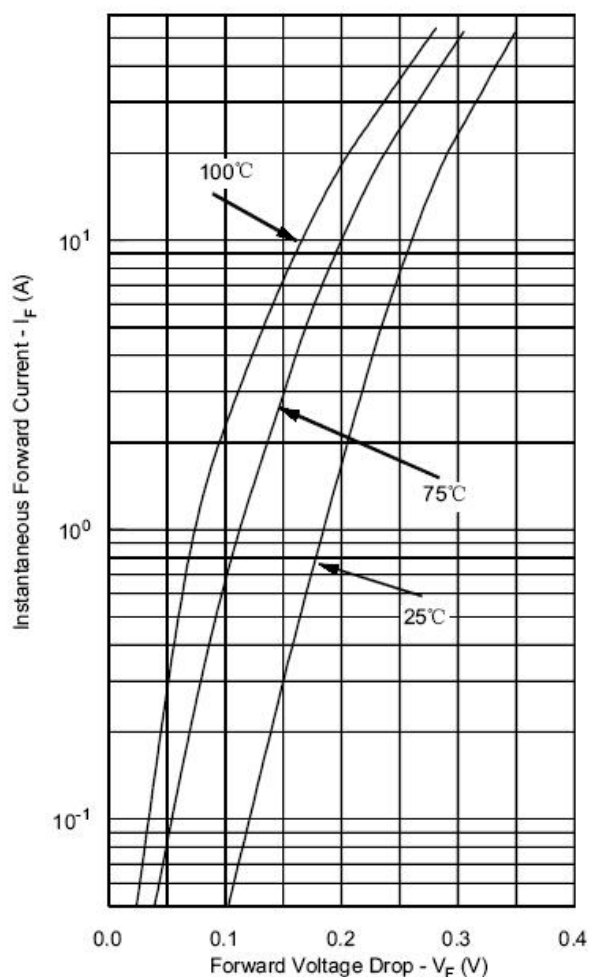
SPD-2A

Suffix "R" Denotes Reversed Polarity

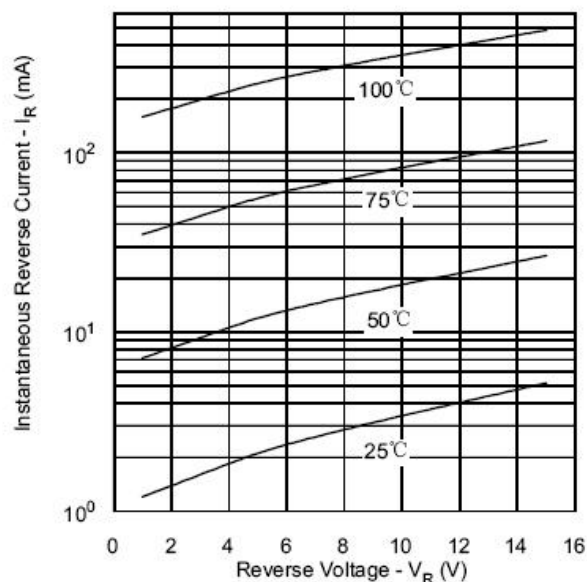
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Ratings and Characteristics Curves

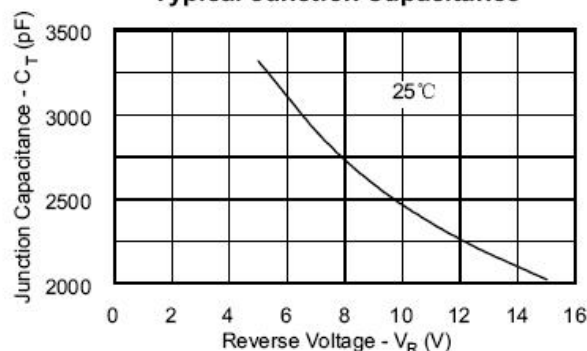
Typical Forward Characteristics



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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