Technical Data *Green Products*
Data Sheet N1146, Rev. -

Power Surface Mount Schottky Rectifier
(60V，60Amp)

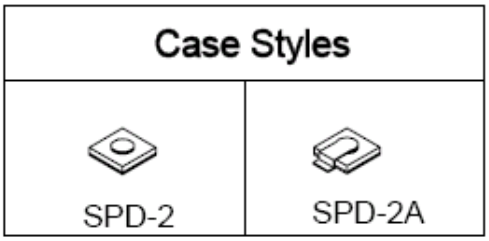
Applications:

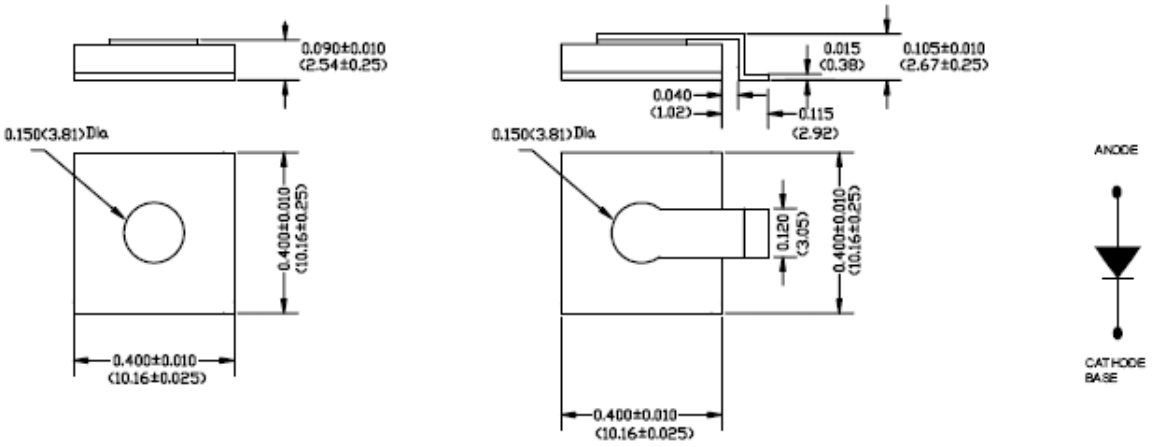
● Switching power supply ● Redundant power subsystems ● Reverse battery protection
● Converters ● Many other high current AC/DC power supplies

Features:

- 150 °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

Mechanical Dimensions: In Inches / mm





SPD-2 **SPD-2A**

Suffix “R” Denotes Reversed Polarity

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Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	60	V
Max. Average Forward	$I_{F(AV)}$	50% duty cycle, rectangular wave form	60	A
Max. Peak One Cycle Non-Repetitive Surge Current (per leg)	I_{FSM}	8.3 ms, half Sine pulse	860	A
Non-Repetitive Avalanche Energy(per leg)	E_{AS}	T_J=25℃,I_{AS}=8.0A, L=1.7mH	54	mJ
Repetitive Avalanche Current(per leg)	I_{AR}	I_{AS} decaying linearly to 0 in 1 μ sec Frequency limited by T_J max. V_A=1.5×V_R	8.0	A

Electrical Characteristics:

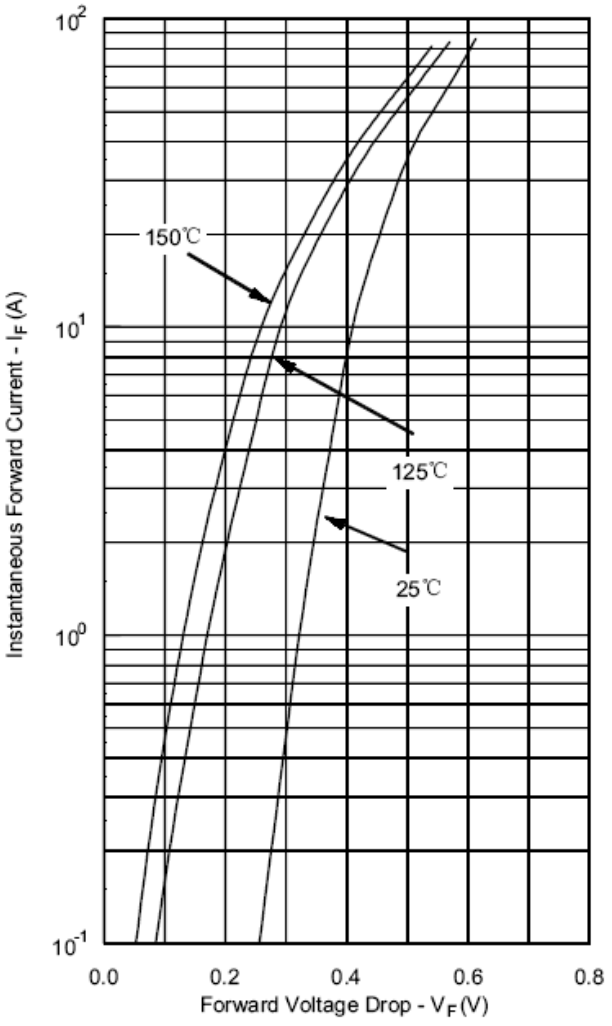
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop*	V_{F1}	@ 60A, Pulse, T_J = 25 °C	0.60	V
	V_{F2}	@ 60A, Pulse, T_J = 125 °C	0.57	V
Max. Reverse Current (per leg) *	I_{R1}	@V_R = rated V_R, Pulse, T_J = 25 °C	6	mA
	I_{R2}	@V_R = rated V_R, Pulse, T_J = 125 °C	420	mA
Max. Junction Capacitance (per leg)	C_J	@V_R = 5V, T_C = 25 °C f_{SIG} = 1MHz	2400	pF

* Pulse Width < 300μs, Duty Cycle <2%

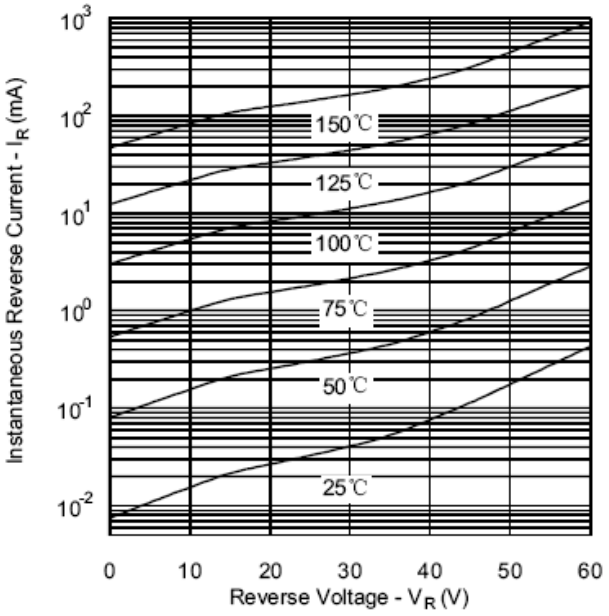
Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-55 to +150	°C
Max. Storage Temperature	T_{stg}	-	-55 to +150	°C
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	0.37	°C/W
Case Style	SPD-2/A			

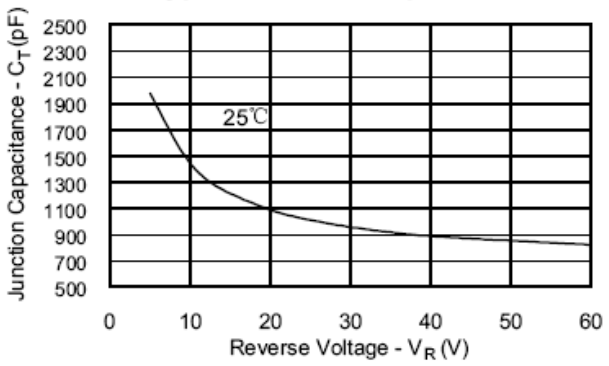
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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