Technical Data *Green Products*
Data Sheet N1236, Rev. -

Power Surface Mount Schottky Rectifier (15V, 120Amp)

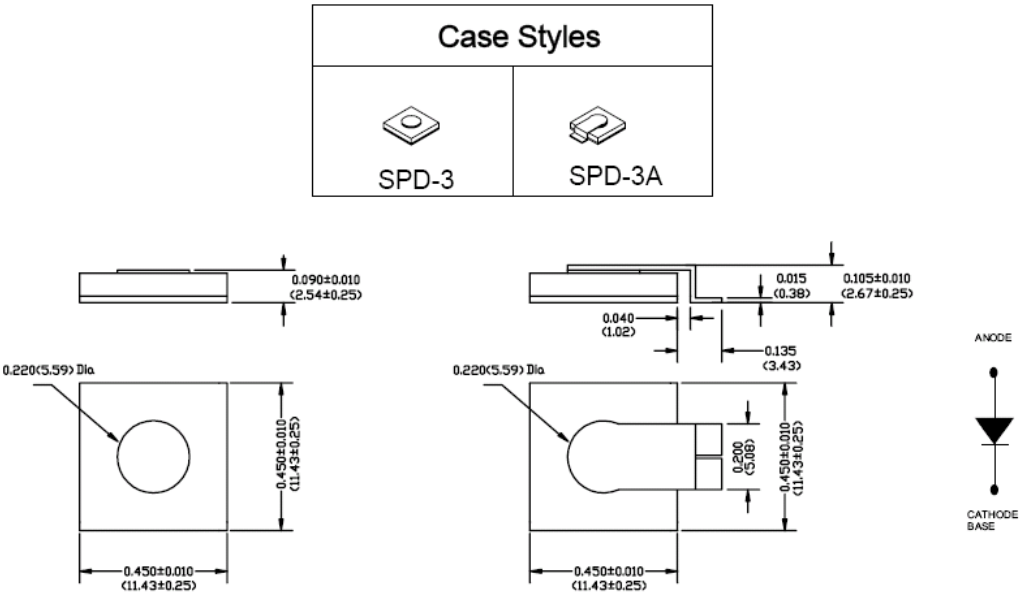
Applications:

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

Features:

- **100 °C T_J operation**
- **Low forward voltage drop**
- **Low reverse leakage current**
- **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-3 **SPD-3A**

Suffix "R" Denotes Reversed Polarity

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Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	15	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form	120	A
Max. Peak One Cycle Non-Repetitive Surge Current (per leg)	I_{FSM}	8.3 ms, half Sine pulse	1650	A

Electrical Characteristics:

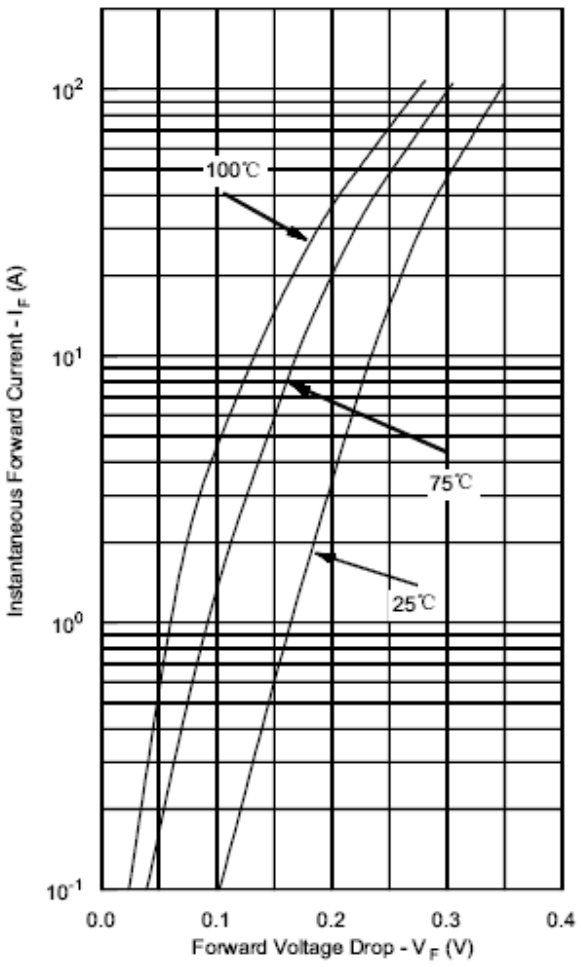
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop*	V_{F1}	@ 120A, Pulse, T_J = 25 °C	0.41	V
	V_{F2}	@ 120A, Pulse, T_J = 125 °C	0.37	V
Max. Reverse Current (per leg) *	I_{R1}	@V_R = rated V_R ,Pulse, T_J = 25 °C	40	mA
	I_{R2}	@V_R = rated V_R ,Pulse, T_J = 125 °C	2000	mA
Max. Junction Capacitance (per leg)	C_J	@V_R = 5V, T_C = 25 °C f_{SIG} = 1MHz ,V_{SIG}=50mV(p-p)	7200	pF

* Pulse Width < 300μs, Duty Cycle <2%

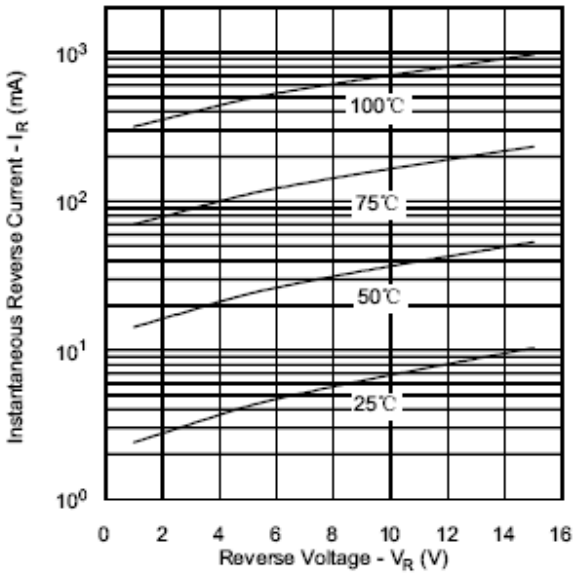
Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-55 to +125	°C
Max. Storage Temperature	T_{stg}	-	-55 to +100	°C
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	0.20	°C/W
Case Style	SPD-3/A			

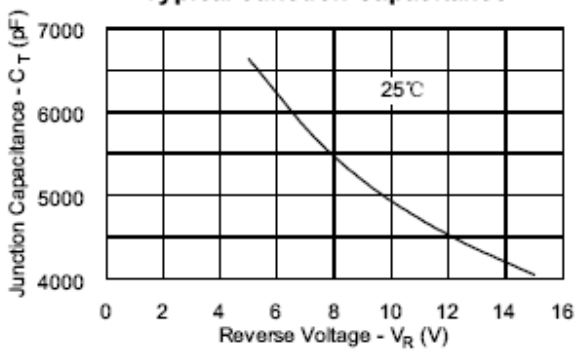
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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