

Technical Data Data Sheet N1167, Rev. - **Green Products**

Power Surface Mount Schottky Rectifier (200V, 120Amp)

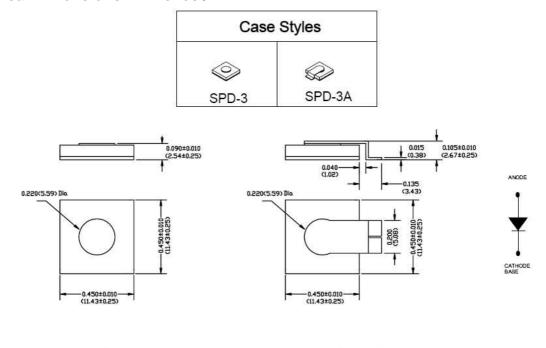
Applications:

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

Features:

- 175 °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



Suffix "R" Denotes Reversed Polarity

SPD-3

SPD-3A

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Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V _{RWM}	-	200	V
Average Forward Current	I _{F(AV)}	50% duty cycle, rectangular wave form	120	А
Peak One Cycle Non- Repetitive Surge Current (per leg)	I _{FSM}	8.3 ms, half Sine pulse	1650	Α

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop*	V_{F1}	@ 120A, Pulse, T _J = 25 °C	0.95	V
	V_{F2}	@ 120A, Pulse, T _J = 125 °C	0.79	V
Reverse Current (per leg) *	I _{R1}	$@V_R = \text{rated } V_R \text{,Pulse,}$	2.1	mA
		$T_J = 25 ^{\circ}C$		
	I _{R2}	$@V_R = \text{rated } V_R$, Pulse,	48	mA
		T _J = 125 °C		
Junction Capacitance	CJ	@V _R = 5V, T _C = 25 °C	1800	pF
(per leg)		$f_{SIG} = 1MHz$, $V_{SIG} = 50mV(p-p)$		

^{*} Pulse Width < 300µs, Duty Cycle <2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	TJ	-	-55 to +175	°C
Max. Storage Temperature	T_{stg}	-	-55 to +175	°C
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	0.20	°C/W
Case Style		SPD-3/A		

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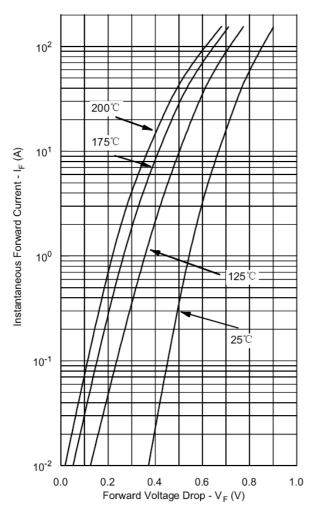
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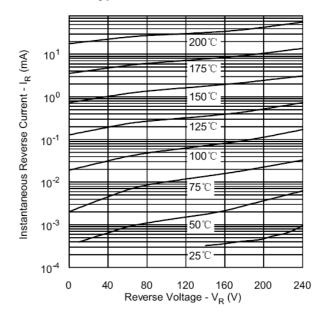


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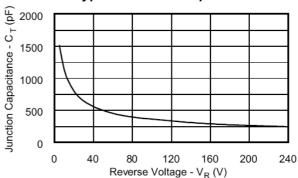
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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