Technical Data Data Sheet N1137, Rev. - **Green Products**

Power Surface Mount Schottky Rectifier (60V, 30Amp)

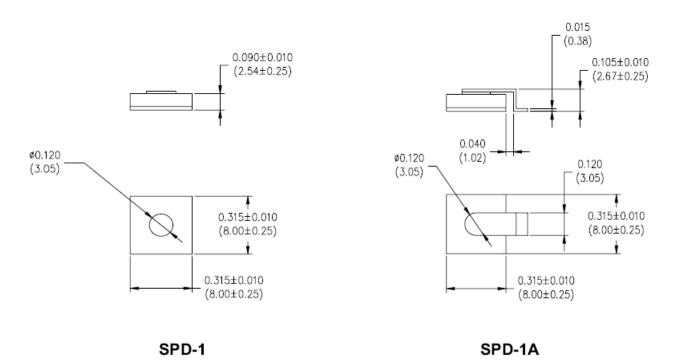
Applications:

- 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 reverse leakage current
- High surge capacities
- Low forward voltage drop
- High frequency operation
- 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



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Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	60	V
Max. Average Forward Current	I _{F(AV)}	50% duty cycle, rectangular wave form	30	Α
Max. Peak One Cycle Non- Repetitive Surge Current	I _{FSM}	8.3 ms, half Sine pulse	570	Α
Non-Repetitive Avalanche Energy	E _{AS}	T _J =25℃,I _{AS} =2.9A,L=6.5mH	27.3	mJ
Repetitive Avalanche Current	I _{AR}	Current decaying linearly to zero in 1 µsec Frequency limited by T_J max. V_A =1.5 $\times V_R$ typical	2.9	А

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop*	V_{F1}	@ 30A, Pulse, T _J = 25 °C	0.56	V
	V_{F2}	@ 30A, Pulse, T _J = 125 °C	0.51	V
Max. Reverse Current*	I _{R1}	@V _R = 60V, T _J = 25 °C	4.0	mA
	I _{R2}	@V _R = 60V, T _J = 125 °C	280	mA
Max. Junction Capacitance	Ст	$@V_R = 5V, T_C = 25 °C$ $f_{SIG} = 1MHz,$ $V_{SIG} = 50mV(p-p)$	1600	pF

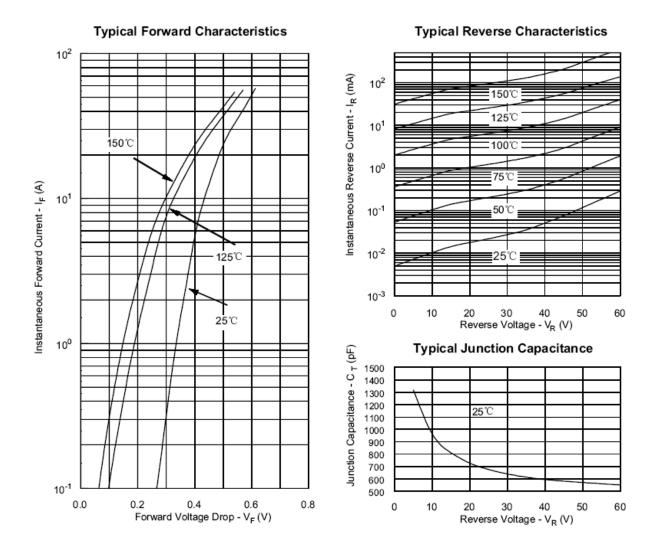
^{*} Pulse Width < 300 μ s, Duty Cycle <2%

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	$R_{ heta JC}$	DC operation	0.50	°C/W
Case Style		SPD-1/A		



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