

Technical Data Green Products

Data Sheet N1152, Rev. -

Power Surface Mount Schottky Rectifier (135/150V, 60Amp)

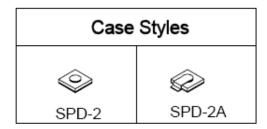
Applications:

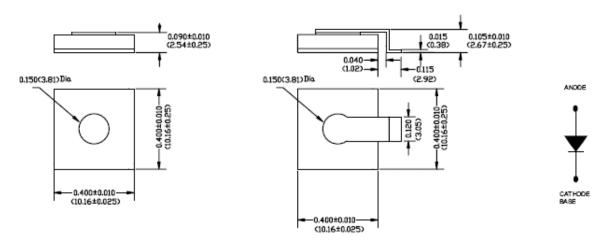
- Switching power supply Redundant power subsystems Reverse battery protection
- Converters Many other high current AC/DC power supplies

Features:

- 175 °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

[•] Weiqi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 🗏 (86) 25-87123907 •

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Maximum Ratings:

Characteristics	Symbol	Condition		Max.	Units
Peak Inverse Voltage	V_{RWM}	-	135	69SPB135/A	V
			150	69SPB150/A	
Max. Average Forward	I _{F(AV)}	50% duty cycle, rectangular wave form		60	Α
Max. Peak One Cycle Non- Repetitive Surge Current (per leg)	I _{FSM}	8.3 ms, half Sine pulse		860	А

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop*	V_{F1}	@ 60A, Pulse, T _J = 25 °C	0.87	V
	V_{F2}	@ 60A, Pulse, T _J = 125 °C	0.72	V
Max. Reverse Current (per	I _{R1}	@V _R = rated V _R , Pulse,	0.1	mA
leg) *		T _J = 25 °C		
	I _{R2}	@V _R = rated V _R , Pulse,	1.6	mA
		T _J = 125 °C		
Max. Junction Capacitance	CJ	$@V_R = 5V, T_C = 25 ^{\circ}C$	100	pF
(per leg)		$f_{SIG} = 1MHz$		
		Vsig=50mV(p-p)		

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

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T _J	-	-55 to +175	°C
Max. Storage Temperature	T_{stg}	-	-55 to +175	°C
Maximum Thermal Resistance Junction to Case	$R_{ heta JC}$	DC operation	0.37	°C/W
Case Style		SPD-2/A		

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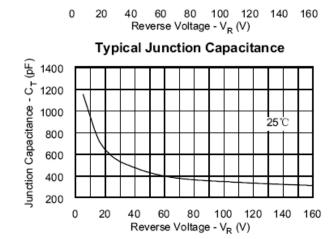
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140

160

Typical Forward Characteristics 10² 175℃ 10¹ Instantaneous Forward Current - I_F (A) 125℃ 10⁰ 25℃ 10⁻¹ 10⁻² 0.0 0.4 0.6 1.0 0.2 8.0 Forward Voltage Drop - V_F (V)

Typical Reverse Characteristics 10¹ Instantaneous Reverse Current - I_R (mA) 10⁰ 10⁻¹ 10⁻² 10⁻³ 50°C 10⁻⁴



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