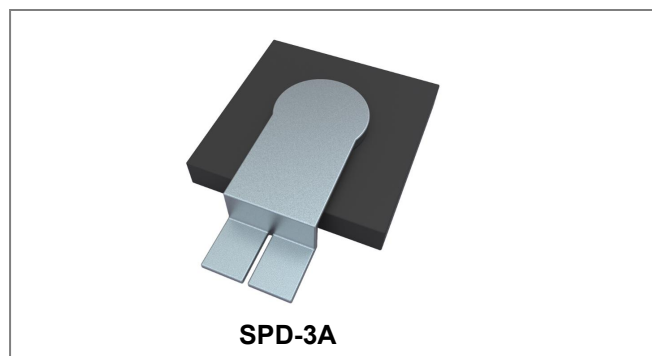


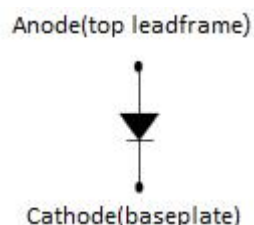
Power Surface Mount Schottky Rectifier (60V, 120Amp)



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
- Baseplate: Pure Sn plated; Terminals: Pure Sn plated
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Schematic & Pin Configuration



Applications

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

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	-	60	V
Average Rectified Forward Current	I _{F(AV)}	50% duty cycle @T _C =116°C, rectangular wave form	120	A
Peak One Cycle Non-Repetitive Surge Current	I _{FSM}	8.3 ms, half Sine pulse	1650	A

Electrical Characteristics:

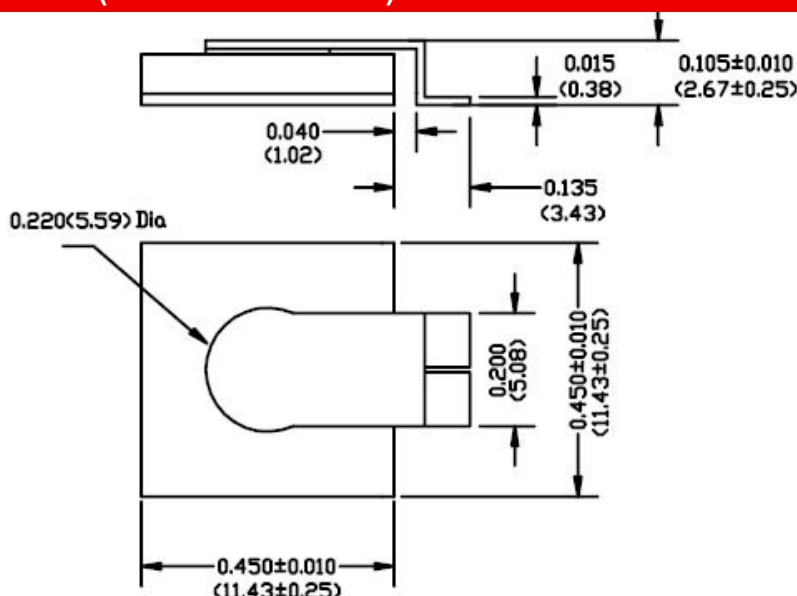
Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop *	V _{F1}	@ 5A, Pulse, T _J = 25 °C	0.45	0.50	V
		@ 10A, Pulse, T _J = 25 °C	0.49	0.54	
		@ 120A, Pulse, T _J = 25 °C	0.73	0.76	
	V _{F2}	@ 5A, Pulse, T _J = 125 °C	0.30	0.36	V
		@ 10A, Pulse, T _J = 125 °C	0.35	0.40	
		@ 120A, Pulse, T _J = 125 °C	0.67	0.70	
Reverse Current*	I _{R1}	@V _R = 15V ,Pulse, T _J = 25 °C	3	20	uA
		@V _R = 60V ,Pulse, T _J = 25 °C	20	100	
	I _{R2}	@V _R = 15V ,Pulse, T _J = 125 °C	6	10	mA
		@ V _R = 60V ,Pulse, T _J = 125 °C	18	48	
Junction Capacitance	C _T	@V _R = 5V, T _C = 25 °C f _{SIG} = 1MHz	3400	4800	pF
Voltage Rate of Change	dv/dt	-	-	10,000	V/μs

* Pulse width < 300 μs, duty cycle < 2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T _J	-	-55 to +175	°C
Storage Temperature	T _{stg}	-	-55 to +175	°C
Typical Thermal Resistance Junction to Case	R _{θJC}	DC operation	0.20	°C/W

Mechanical Dimensions (Inches/Millimeters)



Suffix "R" Denotes Reversed Polarity

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - sales@smc-diodes.com •

Ratings and Characteristics Curves

Figure 1
Typical Forward Characteristics

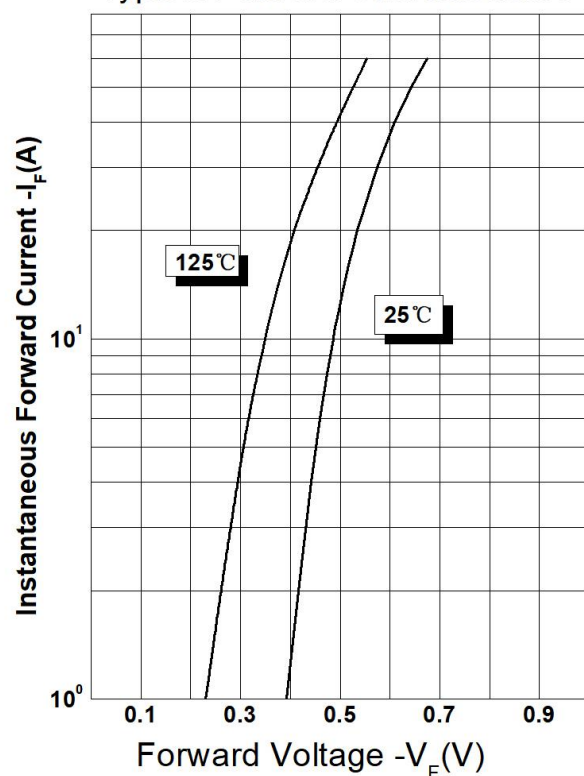


Figure 2
Typical Reverse Characteristics

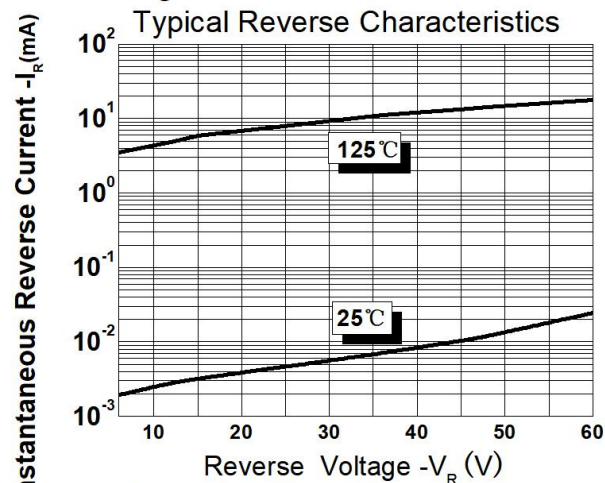
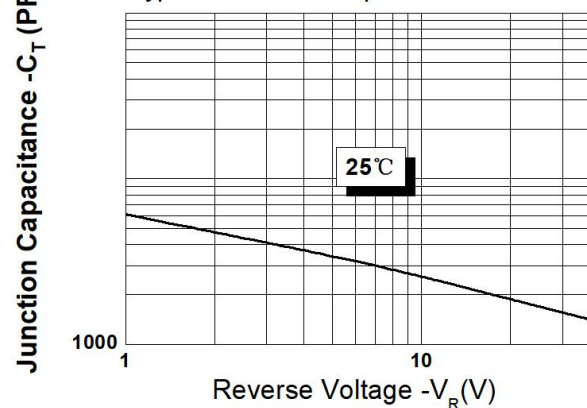


Figure 3
Typical Junction Capacitance



Ordering Information

Device	Package	Shipping
121SPC060A	SPD-3A(Pb-Free)	100pcs/ box

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

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