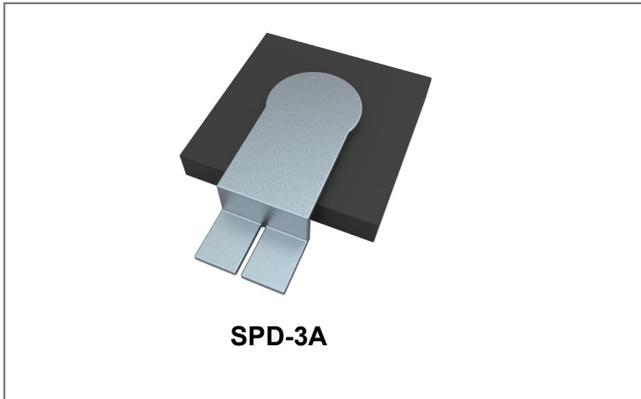


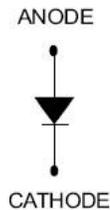
## Power Surface Mount Schottky Rectifier (135V/150V, 120Amp)



### Features

- 175 °C T<sub>J</sub> 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	V <sub>RRM</sub>	-	135	(129SPC135/A)	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		150	(129SPC150/A)	
DC Blocking Voltage	V <sub>R</sub>				
Average Rectified Forward Current	I <sub>F(AV)</sub>	50% duty cycle @T <sub>c</sub> =116°C, rectangular wave form	120		A
Peak One Cycle Non-Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, half Sine pulse	1650		A

**Electrical Characteristics:**

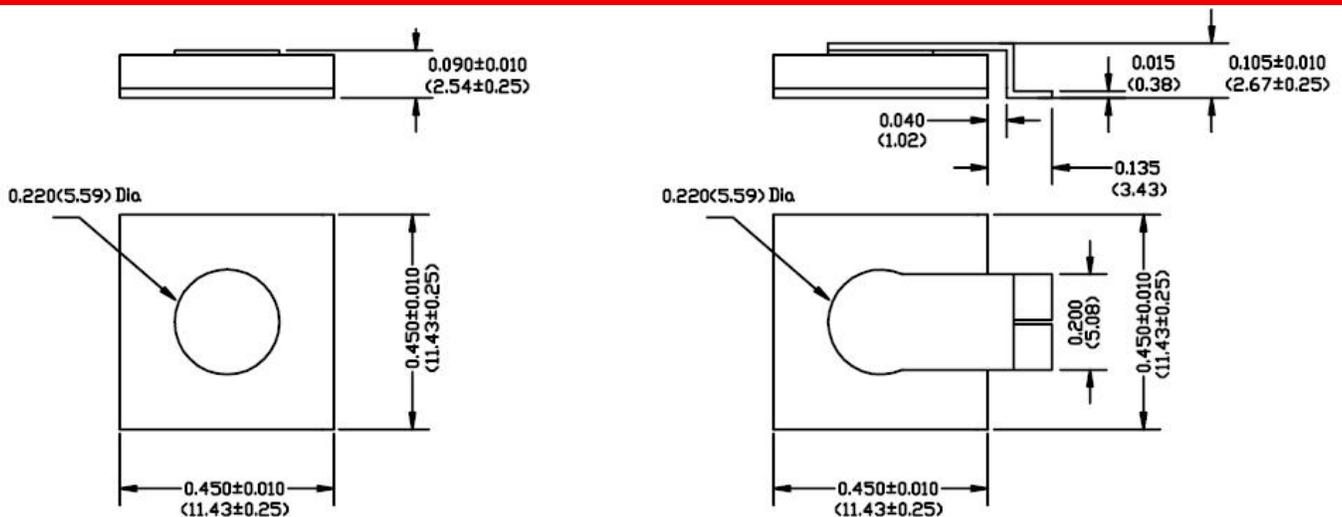
Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop *	V <sub>F1</sub>	@ 120A, Pulse, T <sub>J</sub> = 25 °C	0.82	0.87	V
	V <sub>F2</sub>	@ 120A, Pulse, T <sub>J</sub> = 125 °C	0.67	0.72	V
Reverse Current*	I <sub>R1</sub>	@V <sub>R</sub> = rated V <sub>R</sub> , Pulse, T <sub>J</sub> = 25 °C	0.004	3.0	mA
	I <sub>R2</sub>	@V <sub>R</sub> = rated V <sub>R</sub> , Pulse, T <sub>J</sub> = 125 °C	0.8	48.0	mA
Junction Capacitance	C <sub>T</sub>	@V <sub>R</sub> = 5V, T <sub>C</sub> = 25 °C f <sub>SIG</sub> = 1MHz	2300	3000	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 <sub>J</sub>	-	-55 to +175	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +175	°C
Typical Thermal Resistance Junction to Case	R <sub>θJC</sub>	DC operation	0.20	°C/W

**Mechanical Dimensions (Inches/Millimeters)**



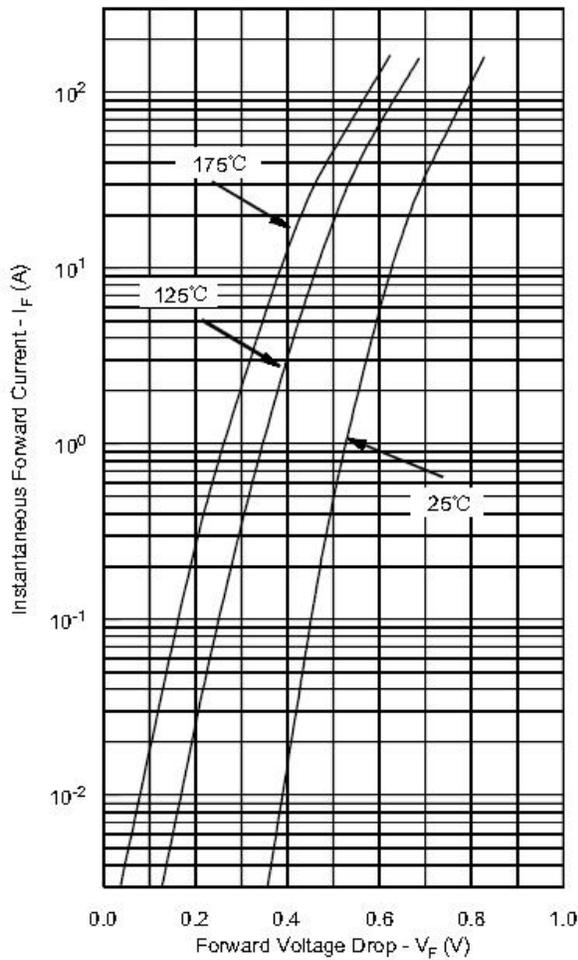
**SPD-3**

**SPD-3A**

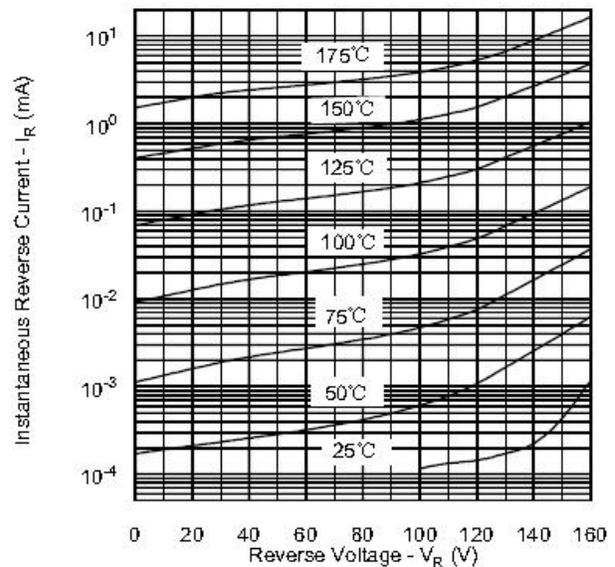
**Suffix "R" Denotes Reversed Polarity**

**Ratings and Characteristics Curves**

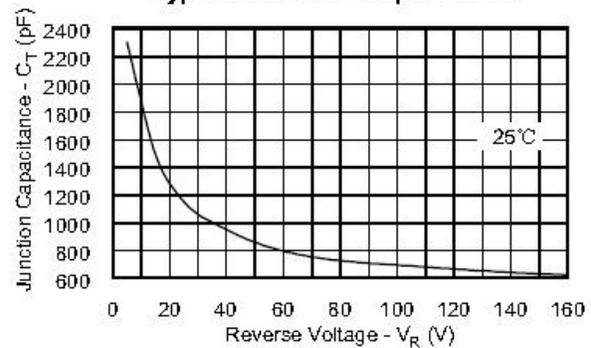
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



**Ordering Information**

Device	Package	Shipping
129SPC135(A)/129SPC150(A)	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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