



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Power Surface Mount Schottky Rectifier (80V/100V, 120Amp)

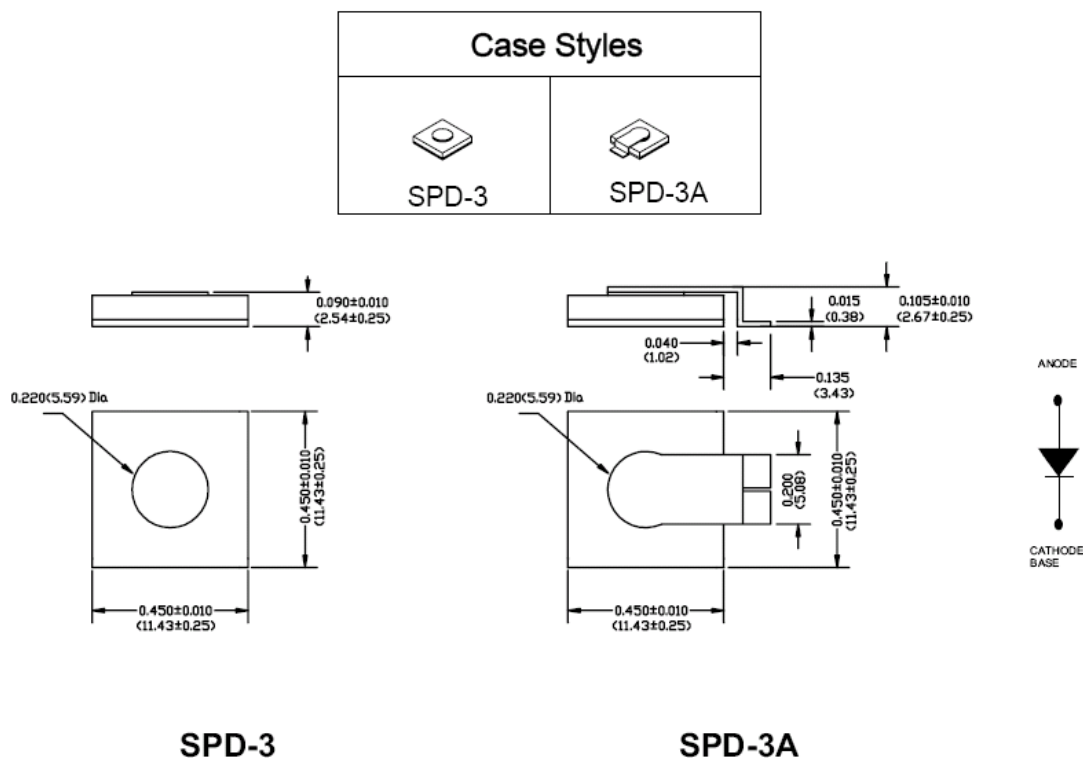
Applications:

- 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
- 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 mm/ Inches



Suffix “R” Denotes Reversed Polarity

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	80 100	(123SPC080/A) (123SPC100/A) V
Max. Average Forward	$I_{F(AV)}$	50% duty cycle, rectangular wave form	120	A
Max. Peak One Cycle Non-Repetitive Surge Current (per leg)	I_{FSM}	8.3 ms, half Sine pulse	1650	A
Non-Repetitive Avalanche Energy(per leg)	E_{AS}	$T_J=25^{\circ}\text{C}$, $I_{AS}=0.75\text{A}$, $L=40\text{ mH}$	11.25	mJ
Repetitive Avalanche Current(per leg)	I_{AR}	I_{AS} decaying linearly to 0 in 1 μ sec Frequency limited by T_J max. $V_A=1.5 \times V_R$	0.75	A

Electrical Characteristics:

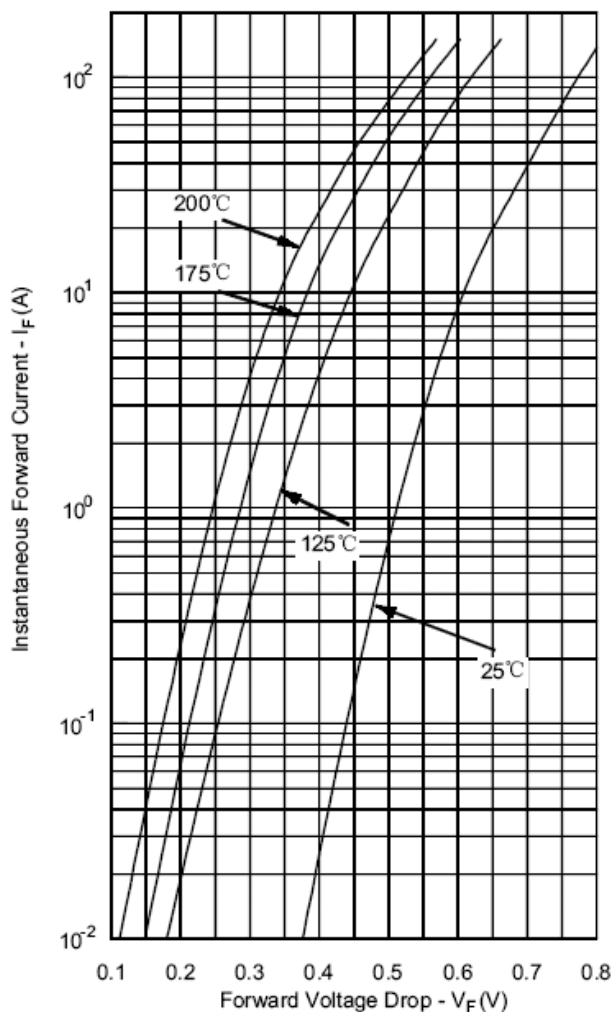
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop*	V_{F1}	@ 120A, Pulse, $T_J = 25^{\circ}\text{C}$	0.87	V
	V_{F2}	@ 120A, Pulse, $T_J = 125^{\circ}\text{C}$	0.72	V
Max. Reverse Current (per leg) *	I_{R1}	@ V_R = rated V_R $T_J = 25^{\circ}\text{C}$	2.0	mA
	I_{R2}	@ V_R = rated V_R $T_J = 125^{\circ}\text{C}$	48.0	mA
Max. Junction Capacitance (per leg)	C_J	@ $V_R = 5\text{V}$, $T_C = 25^{\circ}\text{C}$ $f_{SIG} = 1\text{MHz}$	3000	pF
Max. Voltage Rated of Change	dv/dt	-	10,000	V/ μ s

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

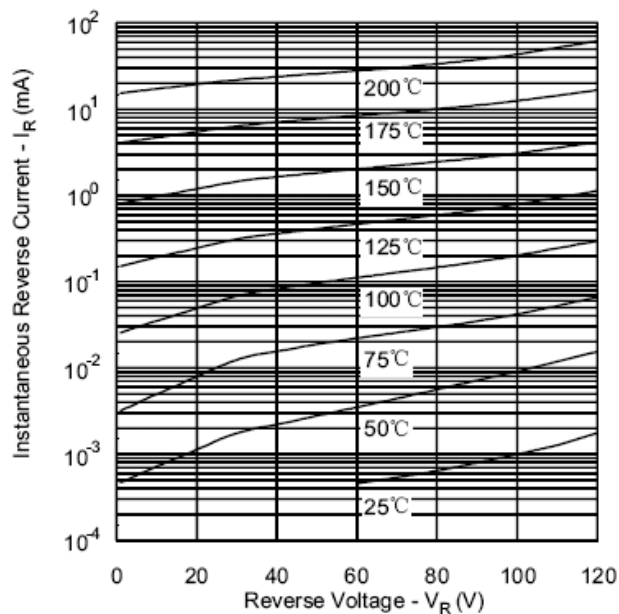
Thermal-Mechanical Specifications:

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

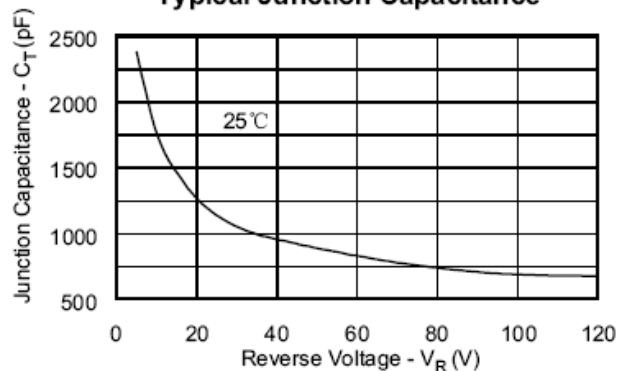
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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