

Technical Data  
Data Sheet 3207, Rev.-

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

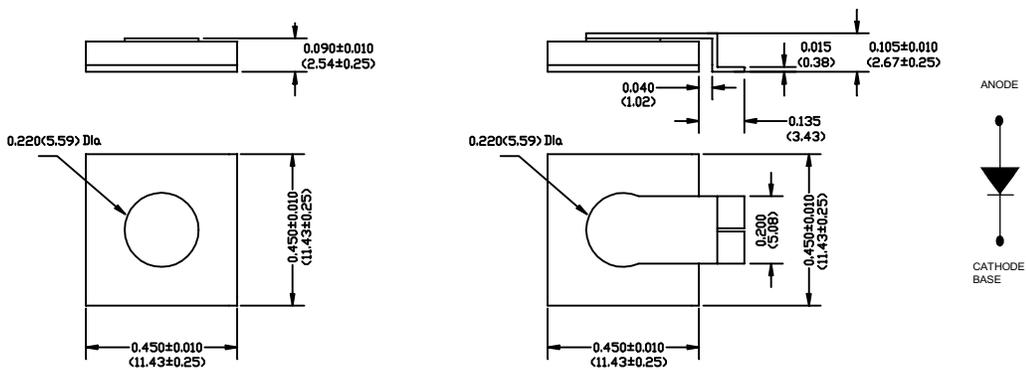
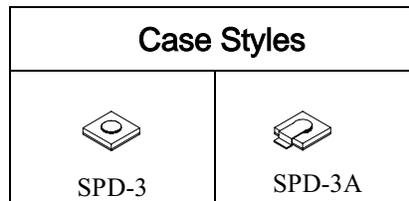
**Applications:**

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

**Features:**

- 175°C T<sub>J</sub> operation
- Low forward voltage drop
- Low reverse leakage current
- High surge capacities
- Low power loss, high efficiency
- Guaranteed reverse avalanche capability
- High frequency operation
- Low profile surface mount package

**Mechanical Dimensions: In Inches / mm**



**SPD-3**

**SPD-3A**

Suffix "R" Denotes Reversed Polarity

Data Sheet 3207, Rev. -  
**Maximum Ratings:**

Characteristics	Symbol	Condition	Max.		Units
Peak Inverse Voltage	$V_{RWM}$	-	135	129SPC135(A)	V
			150	129SPC150(A)	
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form	120		A
Max. Peak One Cycle Non-Repetitive Surge Current	$I_{FSM}$	8.3 ms, Sine pulse	1650		A

**Electrical Characteristics:**

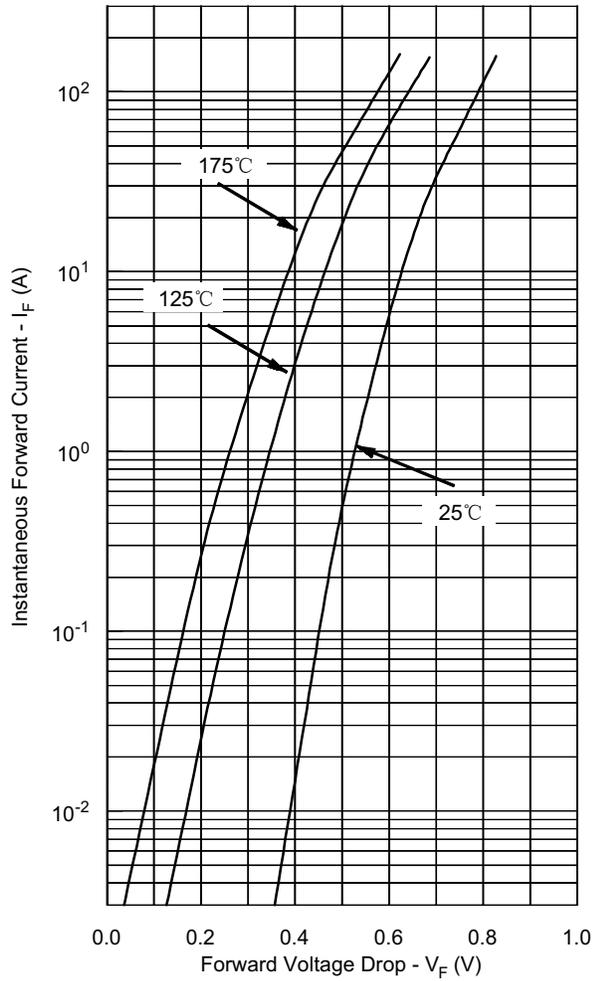
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	$V_{F1}$	@ 120 A, Pulse, $T_J = 25\text{ }^\circ\text{C}$	0.87	V
	$V_{F2}$	@ 120 A, Pulse, $T_J = 125\text{ }^\circ\text{C}$	0.72	V
Max. Reverse Current	$I_{R1}$	@ $V_R = \text{rated } V_R$ , Pulse, $T_J = 25\text{ }^\circ\text{C}$	3.0	mA
	$I_{R2}$	@ $V_R = \text{rated } V_R$ , Pulse, $T_J = 125\text{ }^\circ\text{C}$	48	mA
Max. Junction Capacitance	$C_T$	@ $V_R = 5\text{ V}$ , $T_C = 25\text{ }^\circ\text{C}$ $f_{SIG} = 1\text{ MHz}$ , $V_{SIG} = 50\text{ mV (p-p)}$	3000	pF

**Thermal-Mechanical Specifications:**

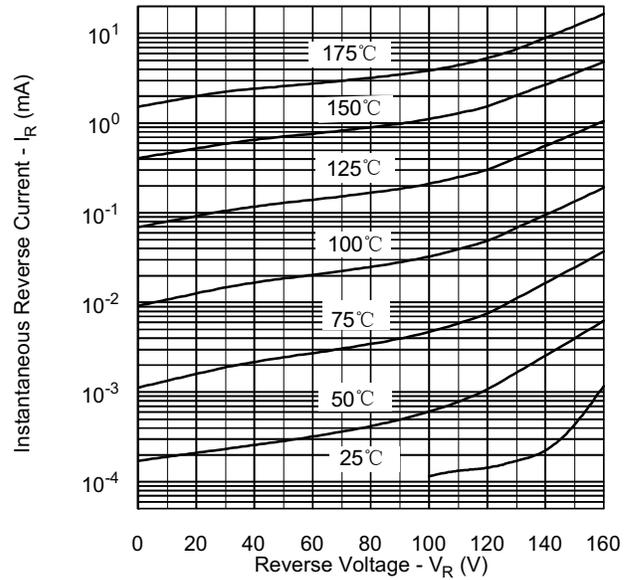
Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	$T_J$	-	-55 to +175	$^\circ\text{C}$
Max. Storage Temperature	$T_{stg}$	-	-55 to +175	$^\circ\text{C}$
Max. Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	0.20	$^\circ\text{C/W}$
Case Style	SPD-3/A			

Data Sheet 3207 , Rev. -

**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**

