

## Power Surface Mount Schottky Rectifier (15V, 30Amp)

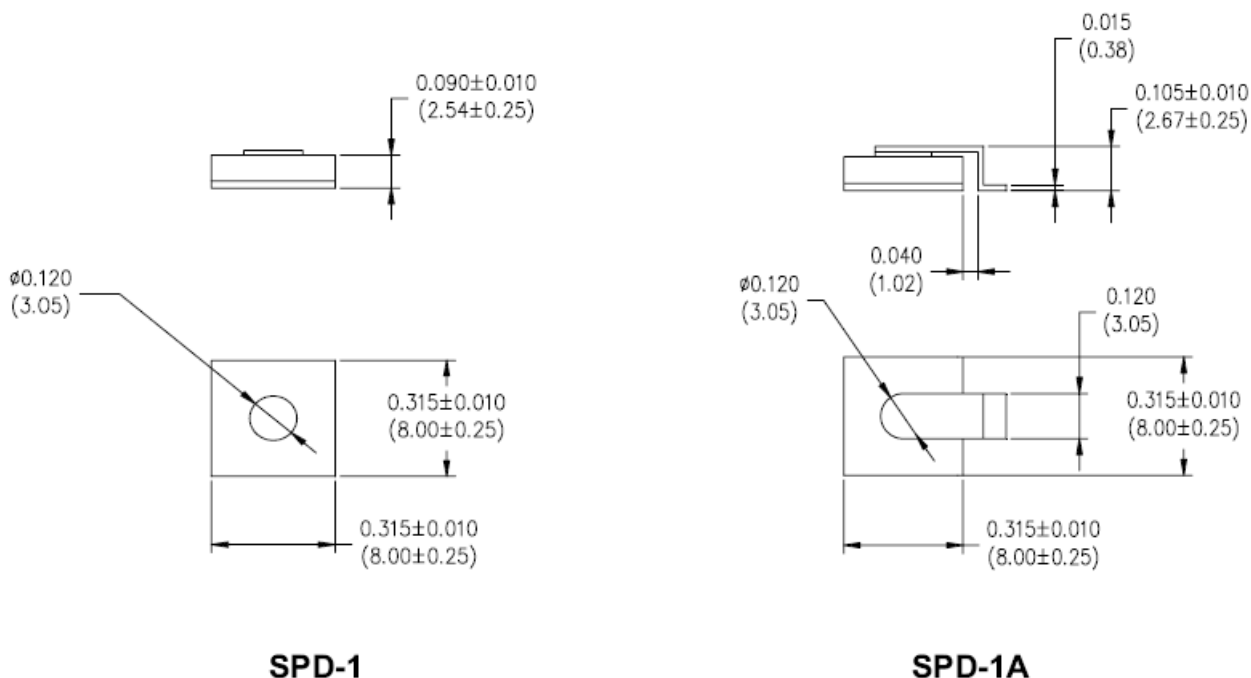
### Applications:

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

### Features:

- 100°C T<sub>J</sub> operation
- Low reverse leakage current
- High surge capacities
- Low forward voltage drop
- High frequency operation
- 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



**Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	15	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form	30	A
Max. Peak One Cycle Non-Repetitive Surge Current	$I_{FSM}$	8.3 ms, half Sine pulse	570	A

**Electrical Characteristics:**

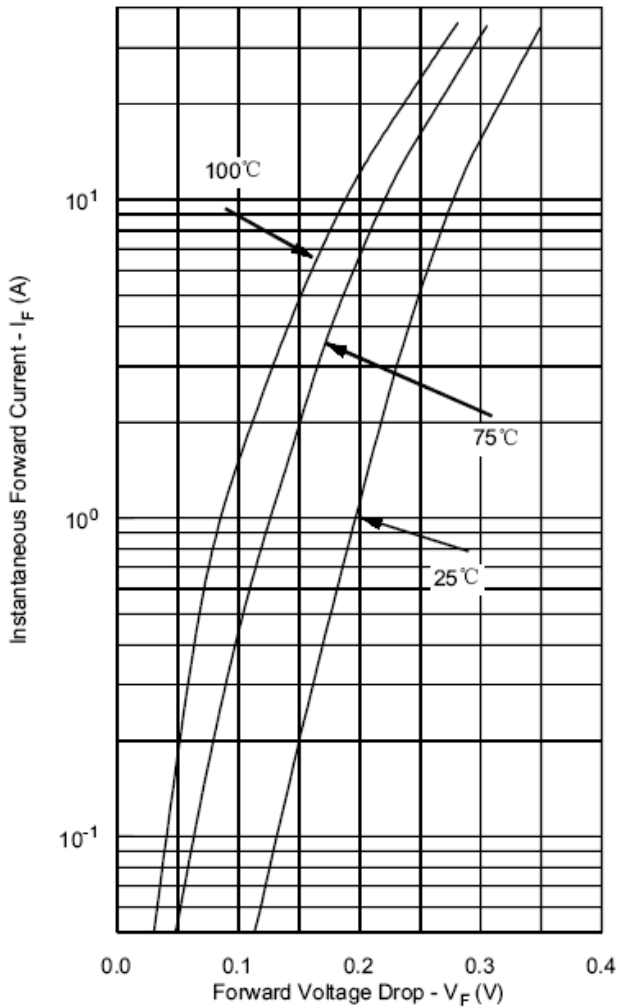
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop*	$V_{F1}$	@ 30A, Pulse, $T_J = 25\text{ }^\circ\text{C}$	0.37	V
	$V_{F2}$	@ 30A, Pulse, $T_J = 125\text{ }^\circ\text{C}$	0.33	V
Max. Reverse Current*	$I_{R1}$	@ $V_R = 15\text{V}$ , $T_J = 25\text{ }^\circ\text{C}$	14	mA
	$I_{R2}$	@ $V_R = 15\text{V}$ , $T_J = 100\text{ }^\circ\text{C}$	680	mA
Max. Junction Capacitance	$C_T$	@ $V_R = 5\text{V}$ , $T_C = 25\text{ }^\circ\text{C}$ $f_{SIG} = 1\text{MHz}$ , $V_{SIG} = 50\text{mV(p-p)}$	2400	pF

\* Pulse Width < 300 $\mu\text{s}$ , Duty Cycle < 2%

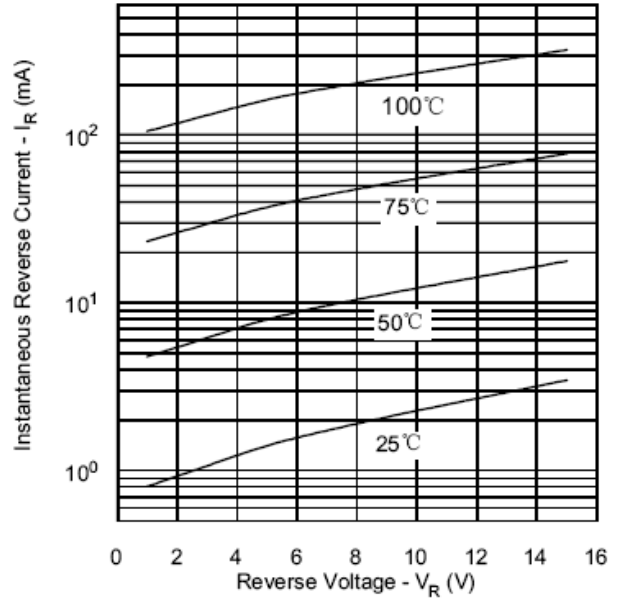
**Thermal-Mechanical Specifications:**

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	$T_J$	-	-55 to +125	$^\circ\text{C}$
Max. Storage Temperature	$T_{stg}$	-	-55 to +100	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	0.50	$^\circ\text{C/W}$
Case Style	SPD-1/A			

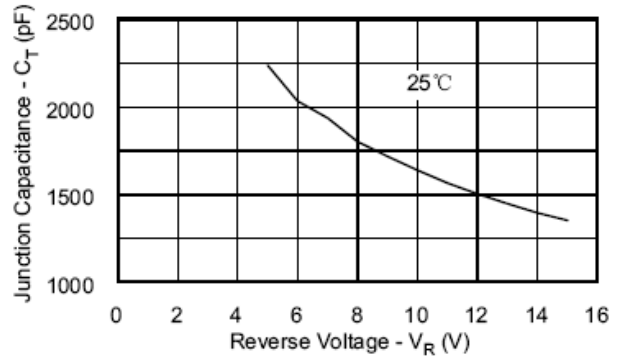
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



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