TECHNICAL DATA
DATA SHEET

Power Surface Mount Schottky Rectifier

(20V, 60Amp)

Applications:

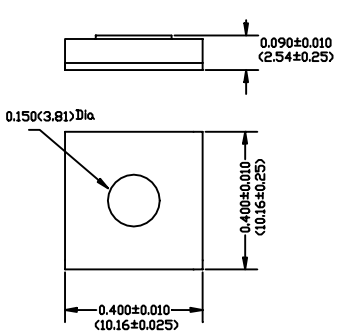
- **Switching power supplies • Converters • Reverse battery protection**
- **Redundant power subsystems • Many other high current AC/DC power supplies.**

Features:

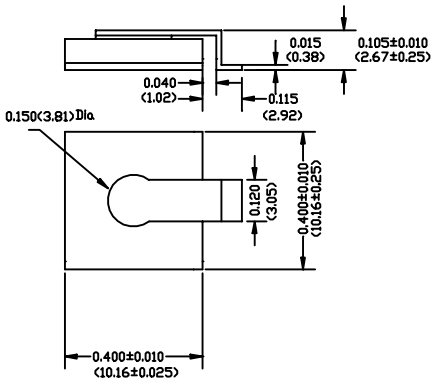
- **150°C T_J operation**
- **Low forward voltage drop**
- **Low reverse leakage current**
- **High surge capacities**
- **Low power loss, high efficiency**
- **Guaranteed reverse avalanche capability**
- **High frequency operation**
- **Low profile surface mount package**

Mechanical Dimensions: In Inches / mm

Case Styles	
	
SPD-2	SPD-2A



SPD-2



SPD-2A

Suffix "R" Denotes Reversed Polarity

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	20	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form	60	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, Sine pulse	860	A
Non-Repetitive Avalanche Energy	E_{AS}	T_J = 25 °C, I_{AS} = 3.4 A L = 6.5 mH	37.6	mJ
Repetitive Avalanche Current	I_{AR}	I_{AS} decay linearly to 0 in 1 µs f limited by T_J max V_A=1.5V_R	3.4	A

Electrical Characteristics:

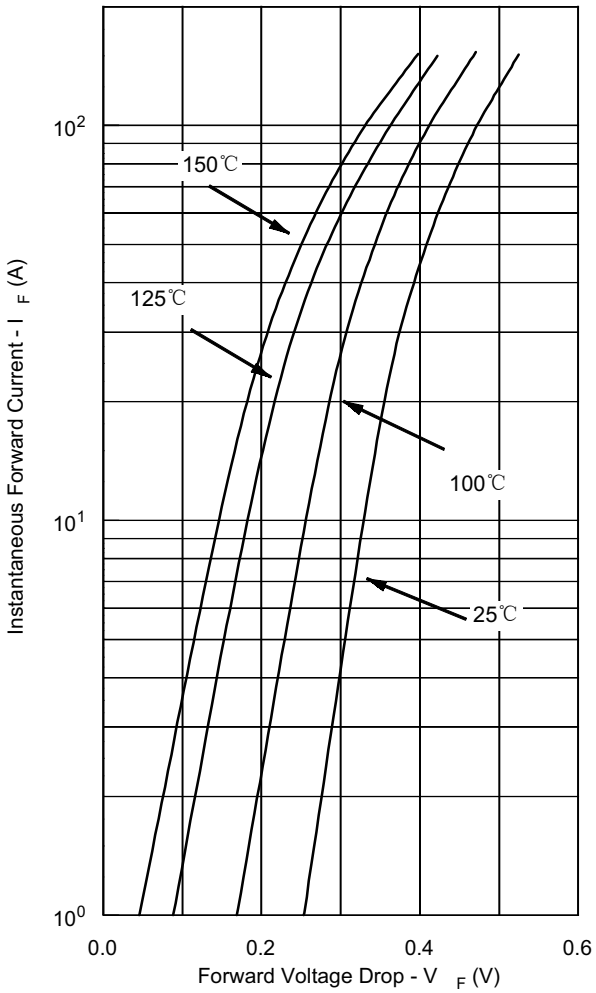
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 60A, Pulse, T_J = 25 °C	0.48	V
	V_{F2}	@ 60A, Pulse, T_J = 125 °C	0.35	V
Max. Reverse Current	I_{R1}	@V_R = 20V, Pulse, T_J = 25 °C	6.0	mA
	I_{R2}	@V_R = 20V, Pulse, T_J = 125 °C	660	mA
Max. Junction Capacitance	C_T	@V_R = 5V, T_C = 25 °C f_{SIG} = 1MHz, V_{SIG} = 50mV (p-p)	4050	pF

Thermal-Mechanical Specifications:

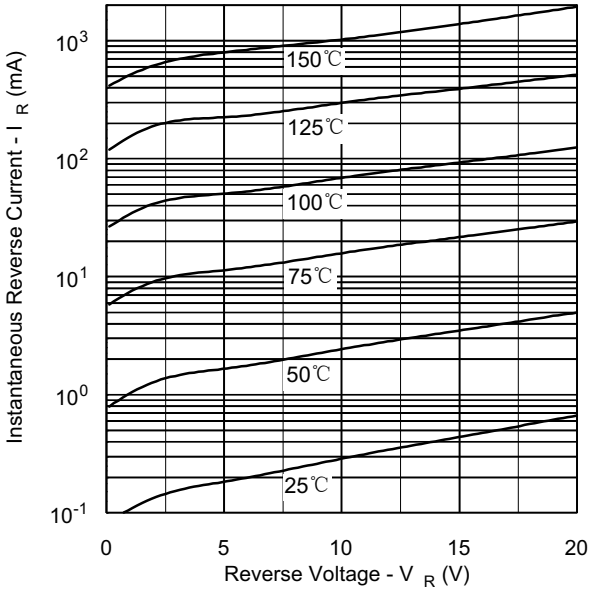
Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-55 to +150	°C
Max. Storage Temperature	T_{stg}	-	-55 to +150	°C
Max. Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	0.37	°C/W
Case Style	PowerPak Surface Mount *			

***** Different anode lead-out options available

Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance