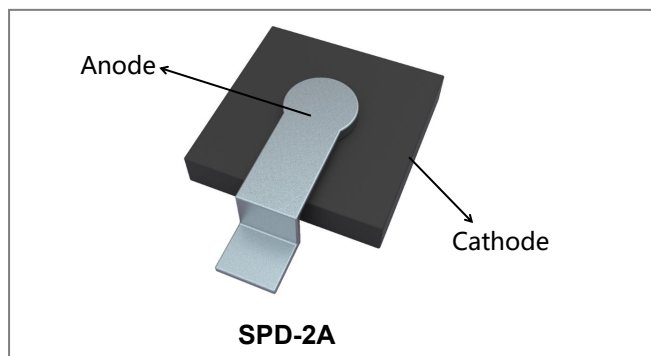


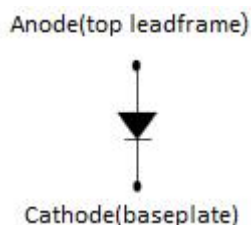
Power Surface Mount Schottky Rectifier (80V/100V, 60Amp)



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
- Base plate: 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(limiting values, at 25 °C unless otherwise specified):

Characteristics	Symbol	Condition	Max.		Units
Peak Repetitive Reverse Voltage	V _{RRM}	-	80	63SPB080A	V
Working Peak Reverse Voltage	V _{RWM}		100	63SPB100A	
DC Blocking Voltage	V _R				
Average Rectified Forward Current	I _{F(AV)}	50% duty cycle @T _C =116°C, rectangular wave form	60		A
Peak One Cycle Non-Repetitive Surge Current	I _{FSM}	8.3 ms, half Sine pulse	860		A
Non-Repetitive Avalanche Energy	E _{AS}	T _J =25°C, I _{AS} =0.75A, L=40 mH	11.25		mJ
Repetitive Avalanche Current	I _{AR}	I _{AS} decaying linearly to 0 in 1 μ sec Frequency limited by T _J max. V _A =1.5 ×V _R	0.75		A

Electrical Characteristics:

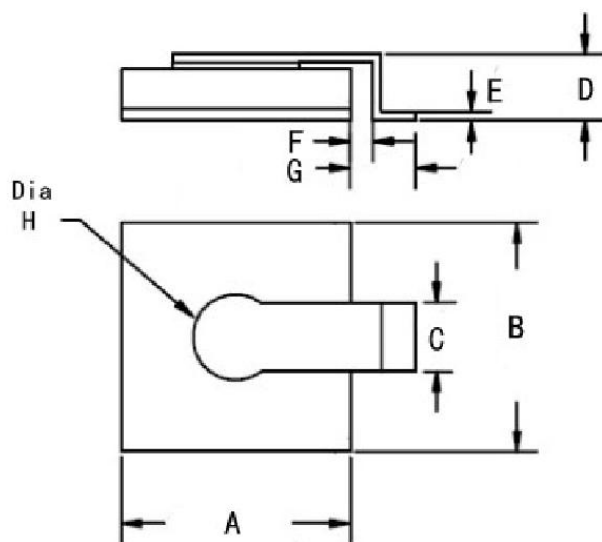
Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop *	V _{F1}	@ 60A, Pulse, T _J = 25 °C	0.82	0.87	V
	V _{F2}	@ 60A, Pulse, T _J = 125 °C	0.71	0.76	V
Reverse Current*	I _{R1}	@V _R = rated V _R , Pulse, T _J = 25 °C	0.3	1000	uA
	I _{R2}	@V _R = rated V _R , Pulse, T _J = 125 °C	0.1	24.0	mA
Junction Capacitance	C _T	@V _R = 5V, T _C = 25 °C f _{SIG} = 1MHz	1340	1500	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 _J	-	-55 to +175	°C
Storage Temperature	T _{stg}	-	-55 to +175	°C
Typical Thermal Resistance Junction to Case	R _{θJC}	DC operation	0.37	°C/W
Approximate Weight	wt	-	1.1	g

Mechanical Dimensions (Inches/Millimeters)



SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	9.81	10.51	0.386	0.414
B	9.81	10.51	0.386	0.414
C	2.90	3.20	0.114	0.126
D	2.42	2.92	0.095	0.115
E	0.33	0.47	0.013	0.019
F	1.02		0.040	
G	4.02		0.158	
H	3.81		0.150	

SPD-2A

Ratings and Characteristics Curves

Figure 1
Typical Forward Characteristics

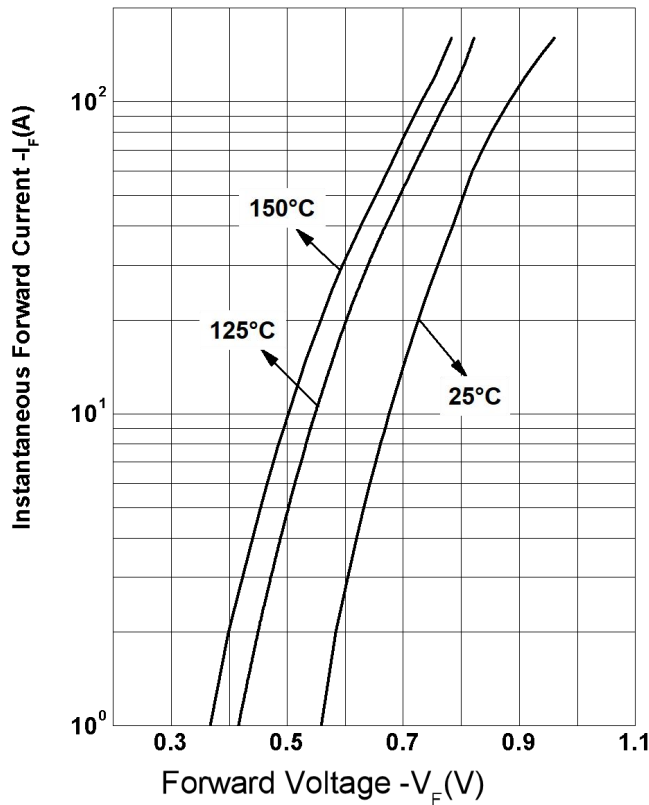


Figure 2
Typical Reverse Characteristics

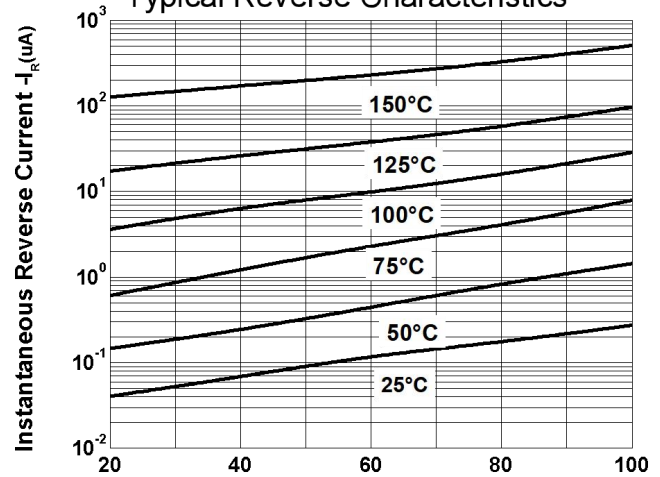
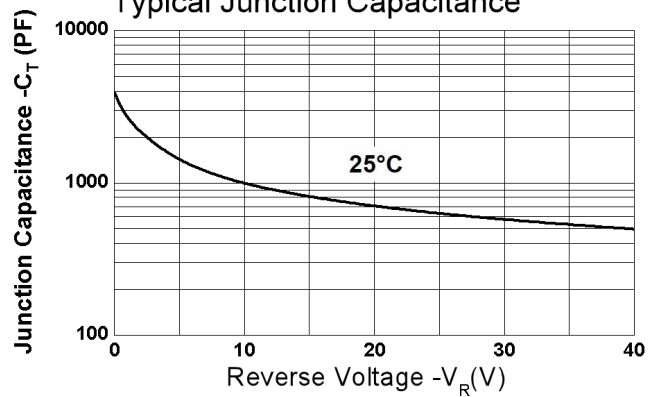


Figure 3
Typical Junction Capacitance



Ordering Information

Device	Package	Shipping
63SPB080A 63SPB100A	SPD-2A(Pb-Free)	100pcs/ box

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