

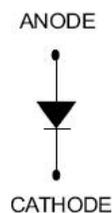
62SPB030/A Power Surface Mount Schottky Rectifier



Features

- 150 °C T_J operation
- Low forward voltage drop
- High surge capacities
- High frequency operation
- Guaranteed reverse avalanche capability
- Low profile surface mount package
- Baseplate: 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:

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	-	30	V
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} =8.0A, L=1.7mH	54	mJ
Repetitive Avalanche Current	I_{AR}	I _{AS} decaying linearly to 0 in 1μsec Frequency limited by T _J max. V _A =1.5 ×V _R	8.0	A

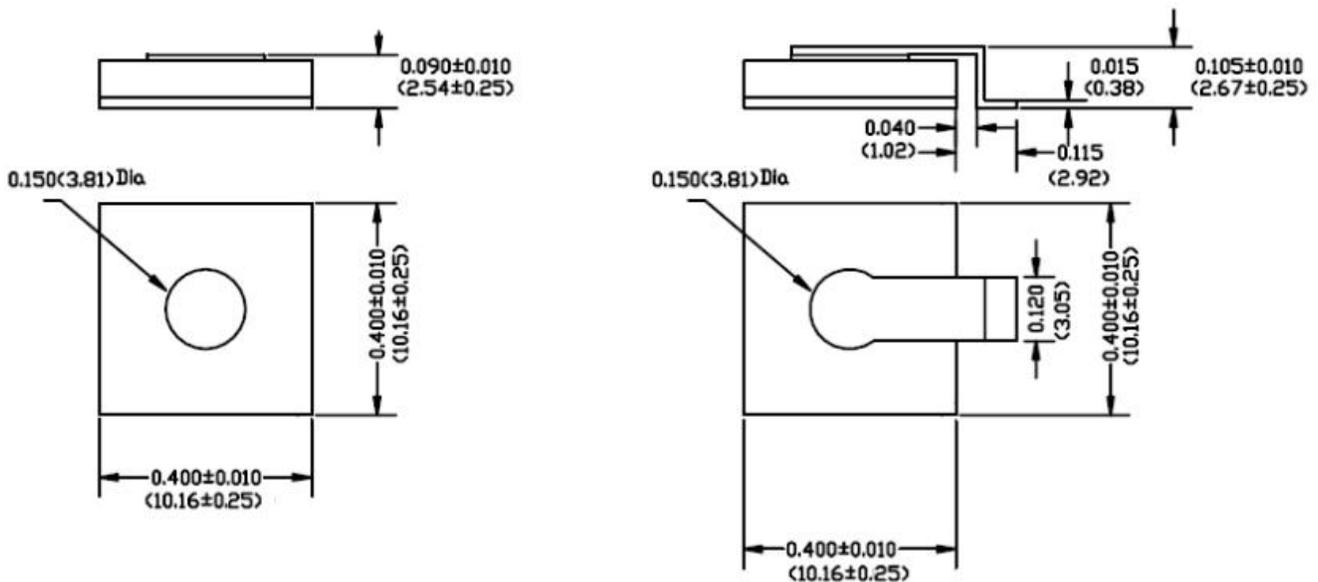
Electrical Characteristics:

Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop *	V_{F1}	@ 60A, Pulse, $T_J = 25\text{ }^\circ\text{C}$	0.48	0.53	V
	V_{F2}	@ 60A, Pulse, $T_J = 125\text{ }^\circ\text{C}$	0.39	0.43	V
Reverse Current*	I_{R1}	@ $V_R = \text{rated } V_R$, Pulse, $T_J = 25\text{ }^\circ\text{C}$	0.3	6.0	mA
	I_{R2}	@ $V_R = \text{rated } V_R$, Pulse, $T_J = 125\text{ }^\circ\text{C}$	200	300	mA
Junction Capacitance	C_T	@ $V_R = 5\text{V}$, $T_C = 25\text{ }^\circ\text{C}$ $f_{SIG} = 1\text{MHz}$	2900	3300	pF
Voltage Rate of Change	dv/dt	-	-	10,000	V/ μs

* Pulse width < 300 μs , duty cycle < 2%

Thermal-Mechanical Specifications:

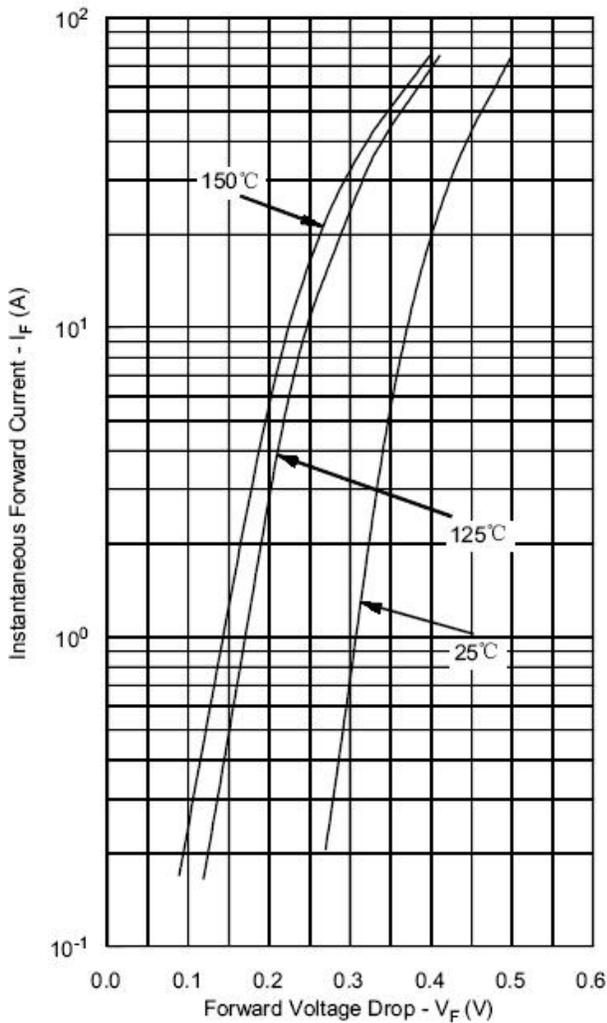
Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T_J	-	-55 to +150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-	-55 to +150	$^\circ\text{C}$
Typical Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	0.37	$^\circ\text{C/W}$
Approximate Weight	wt	-	1.1	g

Mechanical Dimensions (Inches/Millimeters)

SPD-2
SPD-2A
Suffix "R" Denotes Reversed Polarity

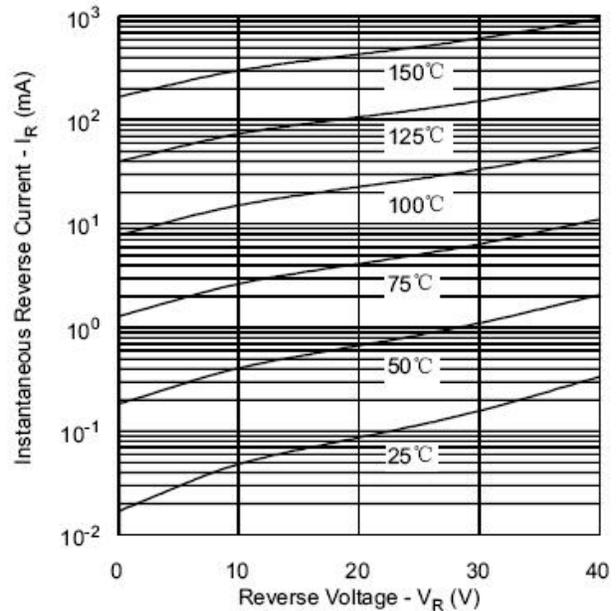
- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - sales@smc-diodes.com •

Ratings and Characteristics Curves

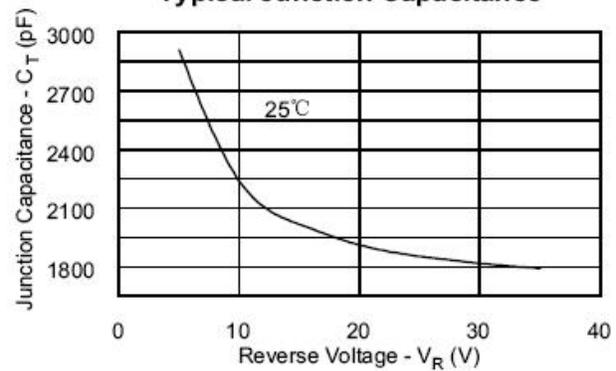
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



Ordering Information

Device	Package	Shipping
62SPB030(A)	SPD-2A(Pb-Free)	100pcs/ box

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

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