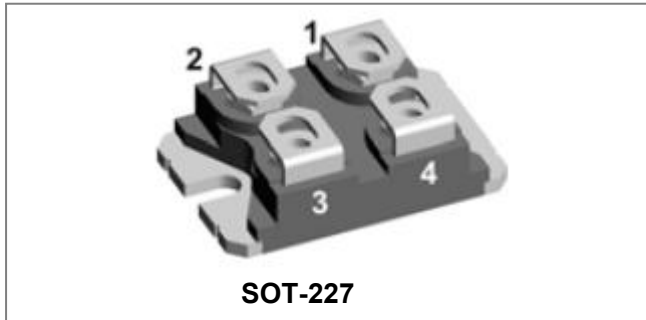


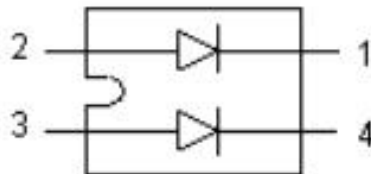
SK2S200-200S Power Schottky Rectifier



Features

- International standard package SOT-227
- Extremely low switching losses
- Low I_{RM} -values
- Copper internally DBC isolated
- Base plate: Nickel plated; Terminals: Nickel plated
- UL approved file E517293
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Applications

- Rectifiers in switch mode power Supplies(SMPS)
- Free wheeling diode in low voltage Converters

Advantages

- High reliability circuit operation
- Low voltage peaks for reduced Protection circuits
- Low noise switching
- Low losses

Maximum Ratings(limiting values, $T_C = 25^\circ\text{C}$ unless otherwise specified) :

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage	V_{RRM}	-	200	V
Working Peak Reverse Voltage	V_{RWM}			
DC Blocking Voltage	V_R			
Average Rectified Forward Current	$I_{F(AV)}$	50% duty cycle @ $T_C = 105^\circ\text{C}$, rectangular wave form	100(Per Leg)	A
			200(Per Device)	
Peak One Cycle Non-Repetitive Surge Current (Per Leg)	I_{FSM}	8.3 ms, half Sine pulse	1400	A

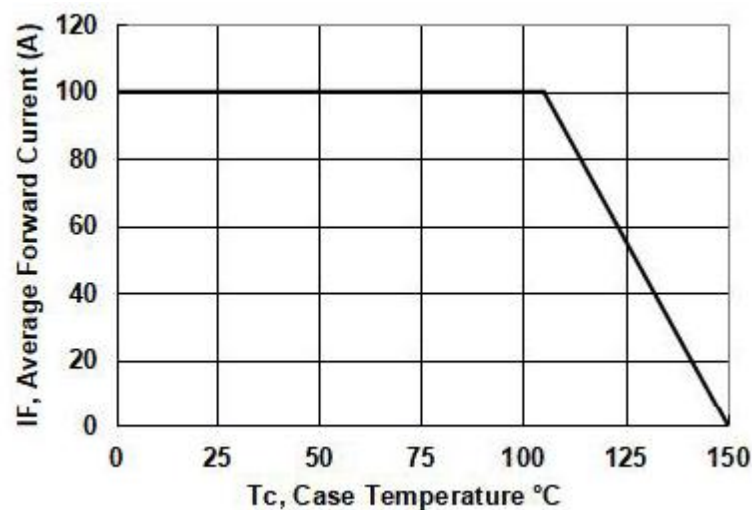
Electrical Characteristics:

Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop(Per Leg)*	V _{F1}	@ 100A, Pulse, T _J = 25 °C @ 200A, Pulse, T _J = 25 °C	0.87 1.00	0.95 1.30	V
	V _{F2}	@ 100A, Pulse, T _J = 125 °C @ 200A, Pulse, T _J = 125 °C	0.76 0.90	0.85 1.10	V
Reverse Current(Per Leg)*	I _{R1}	@V _R = rated V _R , T _J = 25 °C	0.009	0.5	mA
	I _{R2}	@V _R = rated V _R , T _J = 125 °C	0.4	15	mA
Isolation Breakdown Voltage(R.M.S)	Visol	Ac.50Hz; R.M.S;1min, T _J = 25 °C	-	2500	V
		Ac.50Hz; R.M.S; 1sec, T _J = 25 °C	-	3500	

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

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T _J	-	-55 to +150	°C
Storage Temperature	T _{stg}	-	-55 to +150	°C
Thermal Resistance Junction to Case(Peg Device)	R _{θJC}	DC operation	0.4	°C/W
Mounting torque(M4)	M _D	-	1.1-1.5/9-13	Nm/
Terminal connection torque(M4)			1.1-1.5/9-13	lb.in.
Typical Approximate Weight	wt	-	30	g

Ratings and Characteristics Curves


Forward Current VS Case temperature Diode

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

Figure 1
Typical Forward Characteristics

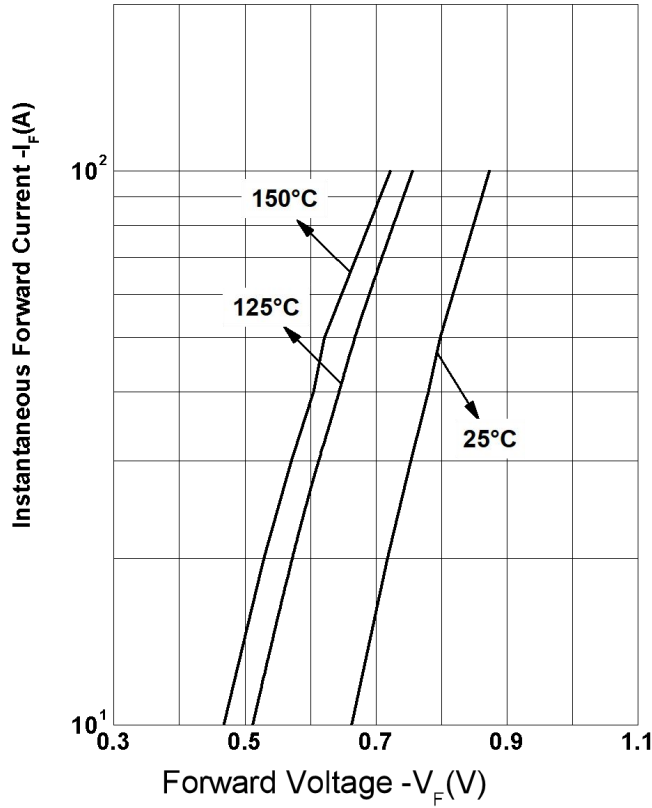
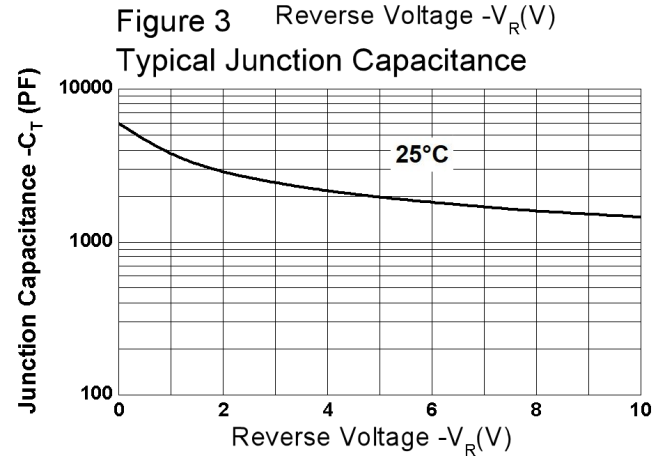
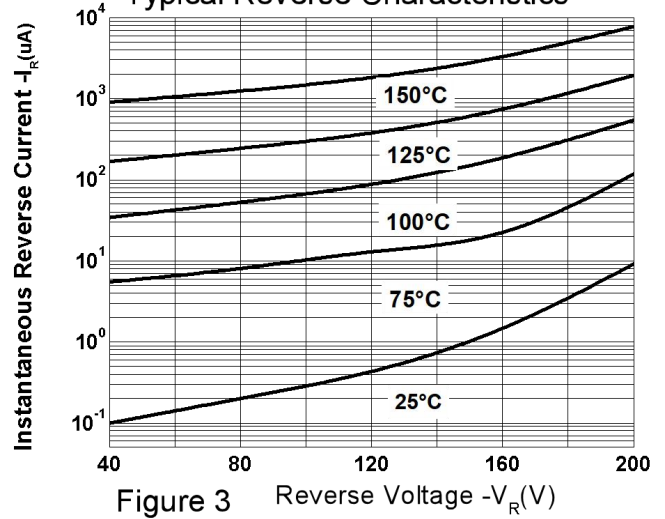
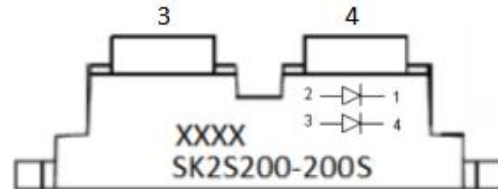


Figure 2
Typical Reverse Characteristics



Ordering Information **Marking Diagram**

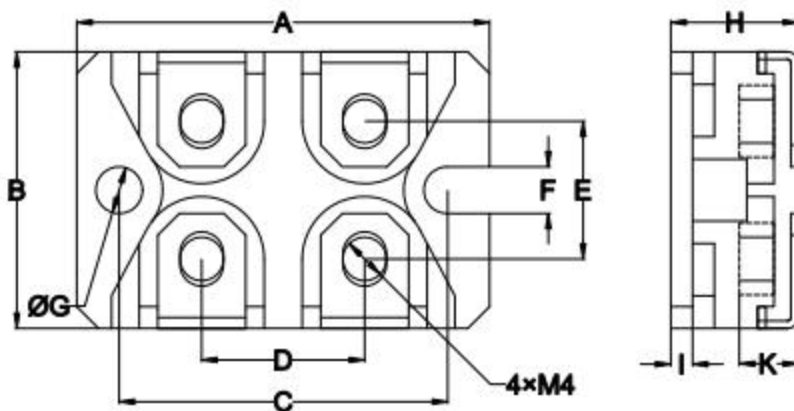
Device	Package	Shipping
SK2S200-200S	SOT-227 (Pb-Free)	36pcs /BULK



Where XXXX is YYWW

- S = SMC's Power Module
- K = SOT-227 Package
- 2 = Circuit Configuration
- S = Schottky Rectifier
- 200 = Forward Current (200A)
- 200 = Reverse Voltage (200V)
- S = S
- YY = Year
- WW = Week

Mechanical Dimensions SOT-227(Millimeters)



SYMBOL	Dimensions in millimeters	
	Min.	Max.
A	37.8	38.2
B	24.8	25.21
C	29.9	30.55
D	14.5	15.5
E	12.2	13.45
F	4.1	4.31
G	φ4.1	φ4.31
H	11	12.5
I	1.9	2.1
K	4.3	6.5

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