

Green Products

# SK2S200-150 High Voltage Power Schottky Rectifier

# **Applications:**

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

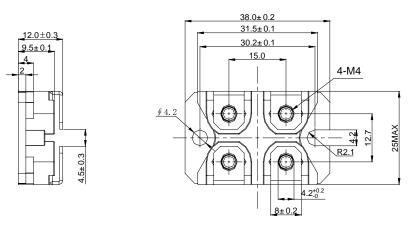
#### Features:

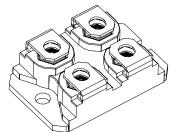
- International standard package SOT-227
- Epoxy meets UL 94V-0
- Extremely low switching losses
- Low IRM-values
- Copper internally DBC isolated
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

### Advantages:

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

### **Mechanical Dimensions: In mm**

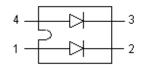




**SOT-227** 

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

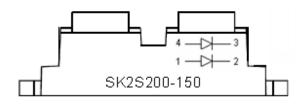






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# **Marking Diagram:**



S = SMC's power module
K = SOT-227 package
2 = Circuit configuration
S = Schottky rectifier
200 = Forward Current (200A)
150 = Reverse Voltage (150V)

Cautions: Molding resin

Epoxy resin UL: 94V-0

# **Ordering Information:**

Device	Package	Shipping
SK2S200-150	SOT-227 (Pb-Free)	10pcs / tube

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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**Maximum Ratings:** 

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Characteristics	Symbol	Condition	Max.		Units
Peak Repetitive Reverse Voltage	VRRM	-	150		V
Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle @T <sub>C</sub> = 110°C, rectangular wave form	peg leg	100	А
			peg device	200	
Peak One Cycle Non- Repetitive Surge Current (peg leg)	I <sub>FSM</sub>	8.3 ms, half Sine pulse	1400		А

# **Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop (per leg) *	$V_{F1}$	<ul> <li>@ 100A, Pulse, T<sub>J</sub> = 25 °C</li> <li>@ 200A, Pulse, T<sub>J</sub> = 25 °C</li> </ul>	0.91 1.09	V
	$V_{F2}$	<ul> <li>@ 100A, Pulse, T<sub>J</sub> = 125 °C</li> <li>@ 200A, Pulse, T<sub>J</sub> = 125 °C</li> </ul>	0.77 0.99	V
Reverse Current (per leg) *	I <sub>R1</sub>	$@V_R = \text{rated } V_R$ $T_J = 25  ^{\circ}C$	4	mA
	I <sub>R2</sub>	$@V_R = \text{rated } V_R$ $T_J = 125  ^{\circ}\text{C}$	10	mA

<sup>\*</sup> Pulse Width < 300µs, Duty Cycle <2%

**Thermal-Mechanical Specifications:** 

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	$T_J$	-	-55 to +150	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +150	°C
thermal resistance junction to case	$R_{\text{th(j-c)}}$	DC operation	0.4	K/W
Mounting torque(M4)			1.1-1.5/9-13	Nm/
Terminal connection torque(M4)	$M_D$	-	1.1-1.5/9-13	lb.in.
Typical Approximate Weight	wt	-	30	g
Case Style		SOT-227		

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