

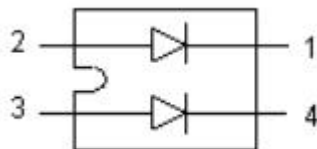
SK2S200-200 Power Schottky Rectifier



Features

- International standard package SOT-227
- Extremely low switching losses
- Low I_{RM} -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

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:

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	-	200	V
Average Rectified Forward Current	$I_{F(AV)}$	50% duty cycle @ $T_C = 105^\circ\text{C}$, rectangular wave form	100(Per Leg) 200(Per Device)	A
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	-	0.95 1.30	V
	V _{F2}	@ 100A, Pulse, T _J = 125 °C @ 200A, Pulse, T _J = 125 °C	-	0.85 1.10	V
Reverse Current(Per Leg)*	I _{R1}	@V _R = rated V _R , T _J = 25 °C	-	0.5	mA
	I _{R2}	@V _R = rated V _R , T _J = 125 °C	-	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%

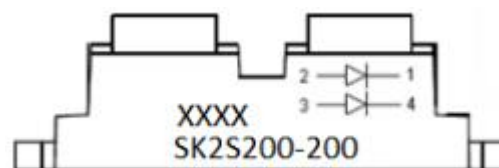
Thermal-Mechanical Specifications:

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/ lb.in.
Terminal connection torque(M4)			1.1-1.5/9-13	
Typical Approximate Weight	wt	-	30	g

Ordering Information

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

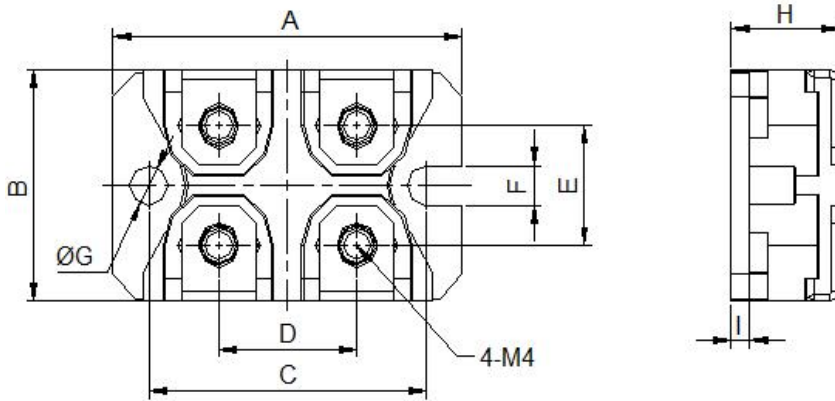
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram


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)
 YY = Year
 WW = Week

Mechanical Dimensions SOT-227(Millimeters)



SYMBOL	Dimensions in millimeters	
	Min.	Max.
A	37.80	38.20
B	25.00	26.00
C	29.90	30.50
D	14.50	15.50
E	12.20	13.20
F	4.10	4.50
G	φ4.1	φ4.5
H	11.00	12.50
I	1.90	2.10

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