

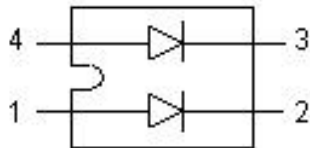
SK2U150-400 Ultrafast Recovery Modules



Features

- Two fully independent diodes
- Fully insulated package
- Ultrafast, soft reverse recovery, with high operation junction temperature (150°C Tj)
- Low forward voltage drop
- Optimized for power conversion: welding and industrial SMPS applications
- Easy to use and parallel
- Industry standard outline
- Designed and qualified for industrial level
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Cathode to anode voltage	V_R	-	400	V
Continuous forward current	I_F	50% duty cycle @T _c =70°C, rectangular wave form	75(Per Leg)	A
			150(Per Device)	
Single pulse forward current (Per Leg)	I_{FSM}	8.3 ms, half Sine pulse, T _c =25°C	950	A

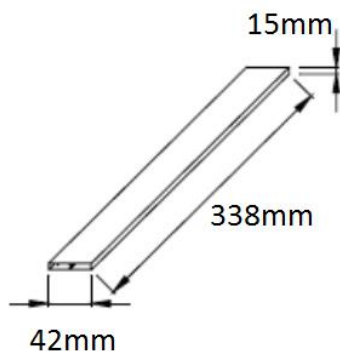
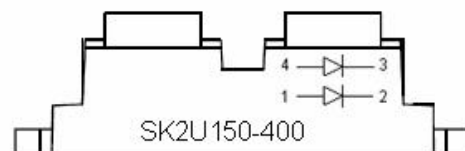
Electrical Characteristics:

Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop (Per Leg) *	V _{F1}	@ 75A, Pulse, T _J = 25 °C	1.00	1.1	V
	V _{F2}	@ 75A, Pulse, T _J = 125 °C	0.80	0.9	V
Reverse Current (Per Leg) *	I _{R1}	@V _R = rated V _R T _J = 25 °C	0.01	50	μA
	I _{R2}	@V _R = rated V _R T _J = 125 °C	1.02	5	mA
Reverse recovery time(Per Leg)	T _{rr}	IF=500mA, IR=1A, I _{rm} =250mA, T _J = 25 °C	73	150	nS

* 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
Maximum Thermal Resistance Junction to Case(Per Leg)	R _{θJC}	DC operation	0.70	K/W
Mounting torque(M4)	M _b	-	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

Tube Specification

Marking Diagram


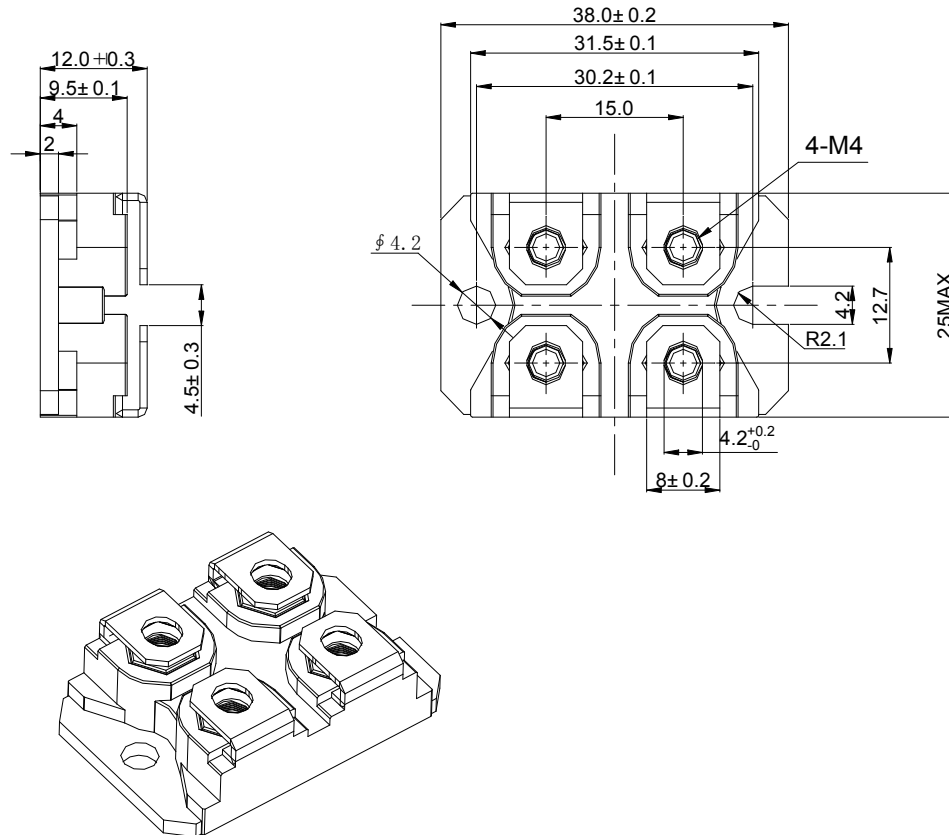
S = SMC's Power Module
 K = SOT-227 Package
 2 = Circuit Configuration
 U = Ultrafast Rectifier
 150 = Forward Current (150A)
 400 = Reverse Voltage (400V)

Ordering Information

Device	Package	Shipping
SK2U150-400	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.

Mechanical Dimensions SOT-227(Millimeters)



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