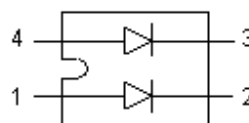


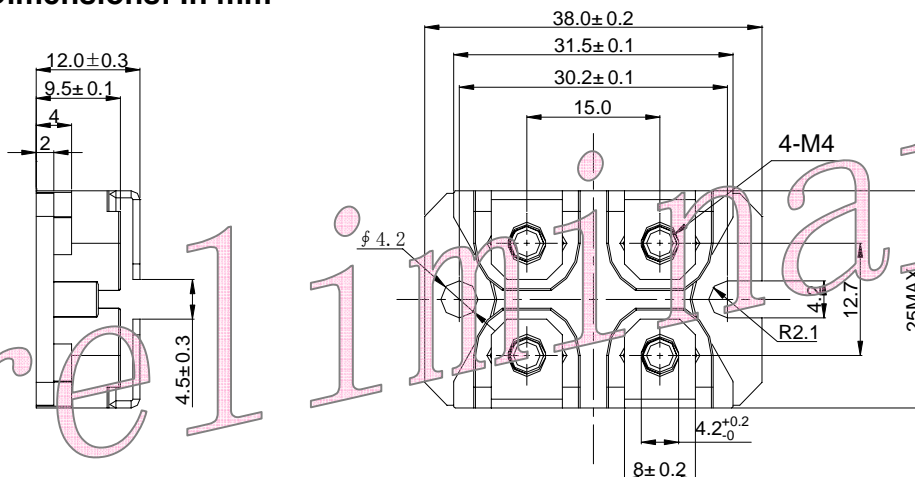
## SK2U150-400 Ultrafast Recovery Modules

### Features:

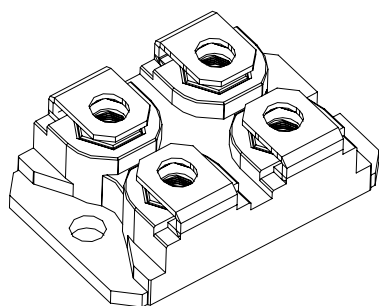
- Two fully independent diodes
- Fully insulated package
- Ultrafast, soft reverse recovery, with high operation junction temperature (150°C Tj)
- Lo forward voltage drop
- Optimized for power conversion: welding and industrial SMPS applications
- Easy to use and parallel
- Industry standard outline
- 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



### Mechanical Dimensions: In mm



Preiminary

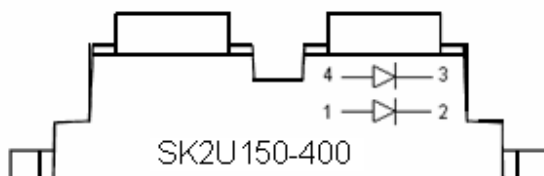


**SOT-227**

Technical Data  
Data Sheet N1640, Rev. -

**Green Products**

**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)

**Cautions:** Molding resin  
Epoxy resin UL:94V-0

**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.

**Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Cathode to anode voltage	$V_R$	-	400	V
Continuous forward current	$I_F$	50% duty cycle @ $T_C = 70^\circ\text{C}$ , rectangular wave form	peg leg	75
			peg device	150
Single pulse forward current per diode	$I_{FSM}$	8.3 ms, half Sine pulse, $T_C = 25^\circ\text{C}$	950	A

**Electrical Characteristics:**

Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop (per leg) *	V <sub>F1</sub>	@ 75A, Pulse, T <sub>J</sub> = 25 °C	1.00	1.1	V
	V <sub>F2</sub>	@ 75A, Pulse, T <sub>J</sub> = 125 °C	0.80	0.9	V
Reverse Current (per leg) *	I <sub>R1</sub>	@V <sub>R</sub> = rated V <sub>R</sub> T <sub>J</sub> = 25 °C	0.01	50	μA
	I <sub>R2</sub>	@V <sub>R</sub> = rated V <sub>R</sub> T <sub>J</sub> = 125 °C	1.02	5	mA
Reverse recovery time	T <sub>rr</sub>	IF=500mA, IR=1A, Irm=250mA, T <sub>J</sub> = 25 °C	73	150	nS

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

**Thermal-Mechanical Specifications:**

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T <sub>J</sub>	-	-55 to +150	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +150	°C
Maximum Thermal Resistance Junction to Case (per leg)	R <sub>θJC</sub>	DC operation	0.70	K/W
Typical Approximate Weight	wt	-	30	g
Case Style	SOT-227			

**DISCLAIMER:**

1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the SMC - Sangdest Microelectronics (Nanjing) Co., Ltd sales department for the latest version of the datasheet(s).

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Preliminary