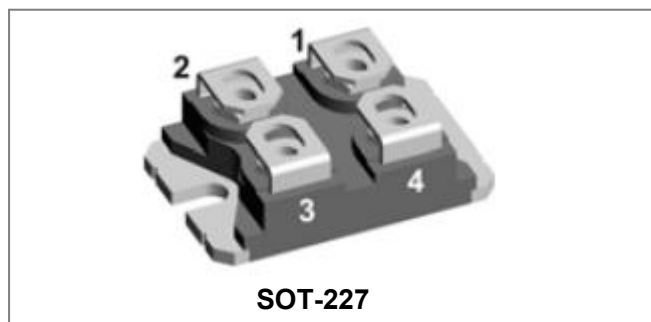


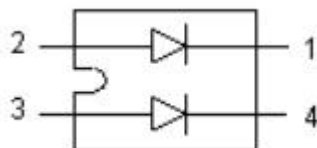
SK2U240-200 Ultrafast Recovery Modules



Features

- International standard package miniBLOC (ISOTOP compatible)
- Isolation voltage 2500 V~
- 2 independent FRED in 1 package
- Planar passivated chips
- Very short recovery time
- Extremely low switching losses
- Low IRM-values
- Soft recovery behaviour
- 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	-	200	V
Continuous forward current per diode	$I_{F(1)}$	50% duty cycle @ $T_C = 70^\circ\text{C}$, rectangular wave form	123	A
Single pulse forward current per diode	I_{FSM}	8.3 ms, half Sine pulse, $T_C = 25^\circ\text{C}$	1300	A
RMS isolation voltage	V_{iSol}	50/60 Hz, RMS $I_{iSol} \leq 1 \text{ mA}$	2500	V~

Note: (1) I_F rating includes reverse blocking losses at T_{JM} , $V_R = 0.8 V_{RRM}$, duty cycle $d = 0.5$ Data according to IEC 60747

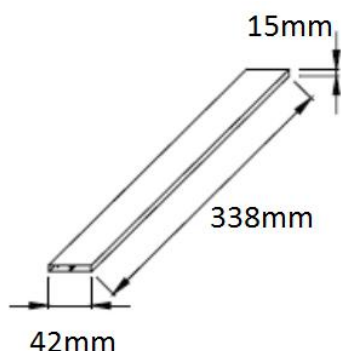
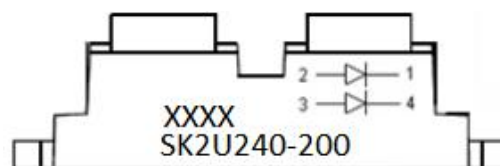
Electrical Characteristics:

Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop (per leg) *	V _{F1}	@ 120A, Pulse, T _J = 25 °C	1.04	1.10	V
	V _{F2}	@ 120A, Pulse, T _J = 150 °C	0.89	0.95	V
Reverse Current (per leg) *	I _{R1}	@V _R = rated V _R , T _J = 25 °C	0.06	500	uA
	I _{R2}	@V _R = rated V _R , T _J = 125 °C	-	20	mA
Reverse recovery time	T _{rr}	IF=500mA, IR=1A, I _{rm} =250mA, T _J = 25 °C	70	90	nS
Reverse recovery time	T _{rr}	IF=1.0A, dIF/dt=400A/μS, VR=30V, T _J = 25 °C	35	50	nS
Peak recovery current	I _{RM}	IF=100A, dIF/dt=200A/μS, VR=100V, T _J = 100 °C	12	15	A

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

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T _J	-	-40 to +150	°C
Storage Temperature	T _{stg}	-	-40 to +150	°C
Maximum Thermal Resistance Junction to Case	R _{θJC}	DC operation	0.5	K/W
Mounting torque	M _D	-	1.5/13	Nm/ lb.in.
Terminal connection torque(M4)			1.5/13	
Typical Approximate Weight	wt	-	30	g
Case Style	SOT-227			

Tube Specification

Marking Diagram


Where XXXX is YYWW

S = SMC's Power Module
 K = SOT-227 Package
 2 = Circuit Configuration
 U = Ultrafast Rectifier
 240 = Forward Current (240A)
 200 = Reverse Voltage (200V)
 YY = Year
 WW = Week

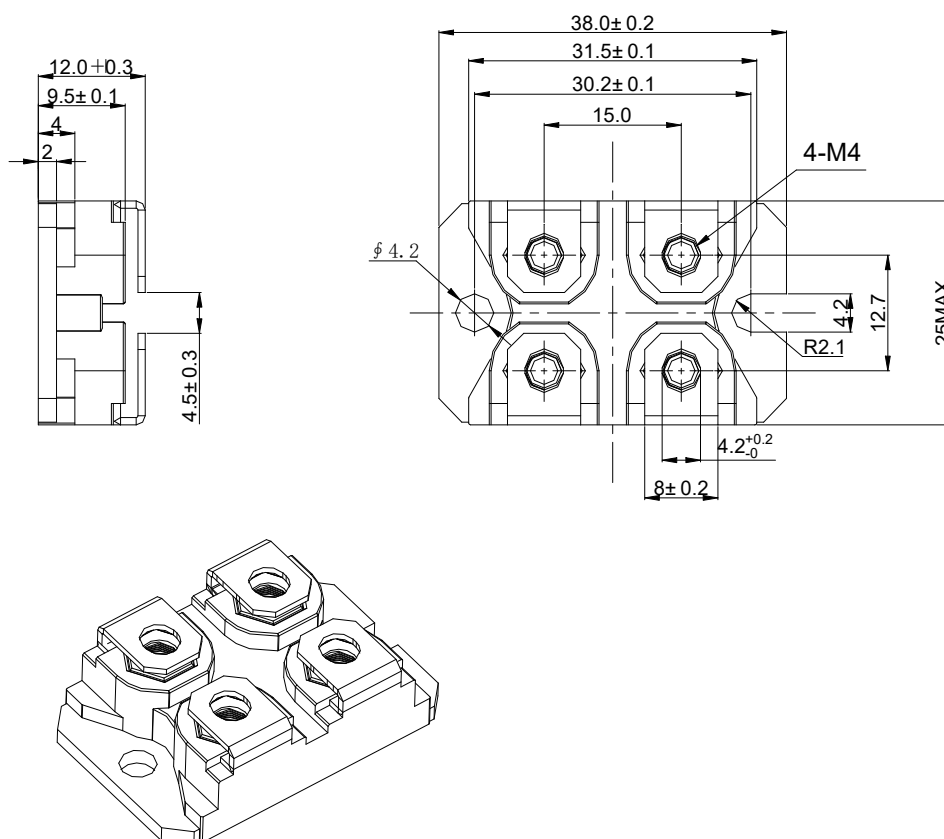
Remark: marking is as above from data code 2036.

Ordering Information

Device	Package	Shipping
SK2U240-200	SOT-227 (Pb-Free)	36pcs / box

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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