

产品规格书

Specification of products

产品名称: 二极管模块

产品型号: MD2X100A1600V NK5

浙江世菱半导体有限公司
ZHEJIANG SHILING SEMICONDUCTOR CO., LTD.

地址: 浙江省 丽水市 莲都区

电话: (0578) 3012571 3615078

传真: (0578) 3611180

邮编: 323000

E-mail: smrshiling01@163.com

Http://www.smrshiling.com

拟制	审核	核准
林益龙	曹剑龙	宗瑞

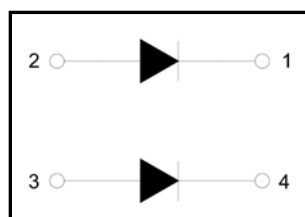
PRODUCT FEATURES

- Blocking voltage:800 to 1800V
- eat transfer through aluminum oxide DBC
- ceramic isolated metal baseplate
- Glass passivated chip
- Popular SOT-227 Package



APPLICATIONS

- Non-controllable rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors



ABSOLUTE MAXIMUM RATINGS

T_c=25°C unless otherwise specified

Maximum Ratings

Symbol	Conditions	Values	Units
I _{FAV}	Single phase ,half wave 180° conduction T _c =109°C	100	A
I _{FSM}	t=10mS T _{vj} =45°C	1916	A
i ² t	t=10mS T _{vj} =45°C	31250	A ² s
V _{isol}	a.c.50HZ;r.m.s.;1min	3000	V
T _{vj}		-40 to +150	°C
T _{stg}		-40 to +125	°C
M _t	To terminals(M4)	2 ± 15%	Nm
M _s	To heatsink(M4)	2 ± 15%	Nm
Weight	Module (Approximately)	39	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	Per diode	0.35	°C/W
R _{th(c-s)}	Module	0.1	°C/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V _{FM}	T=25°C I _F =300A	—	1.30	1.35	V
I _{RD}	T _{vj} =150°C V _{RD} =V _{RRM}	—	—	5	mA

Performance Curves

$T_c=25^\circ\text{C}$ unless otherwise specified

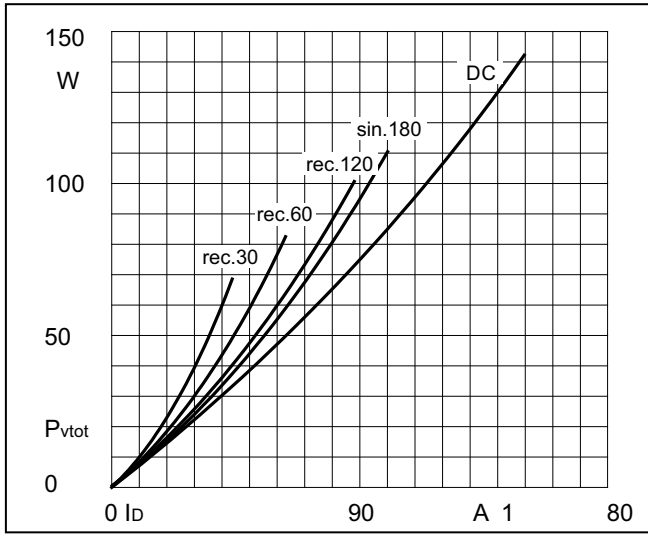


Fig1. Power dissipation

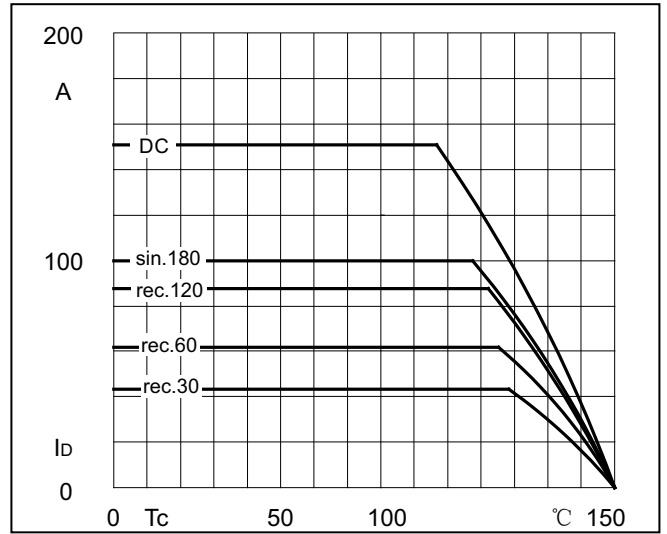


Fig2. Forward Current Derating Curve

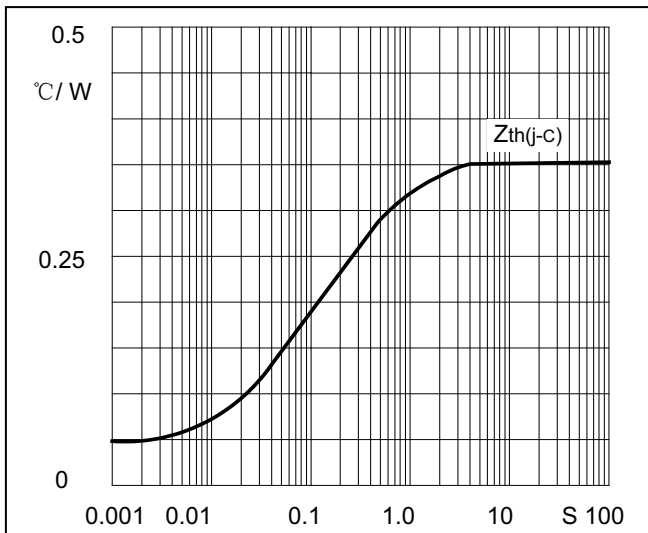


Fig3. Transient thermal impedance

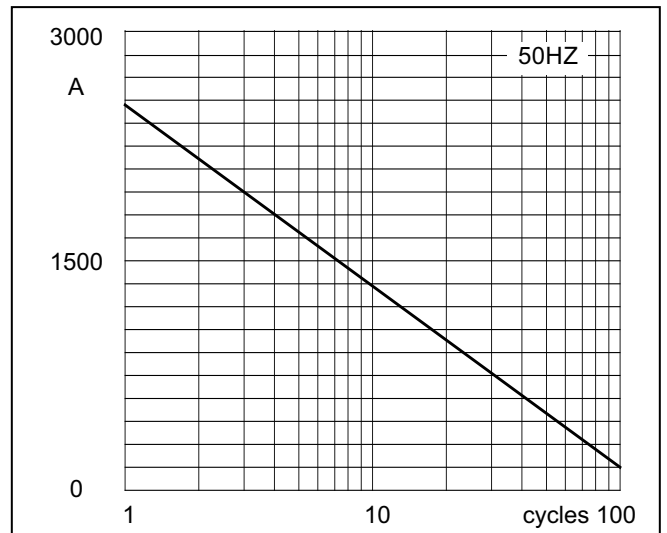


Fig4. Max Non-Repetitive Forward Surge Current

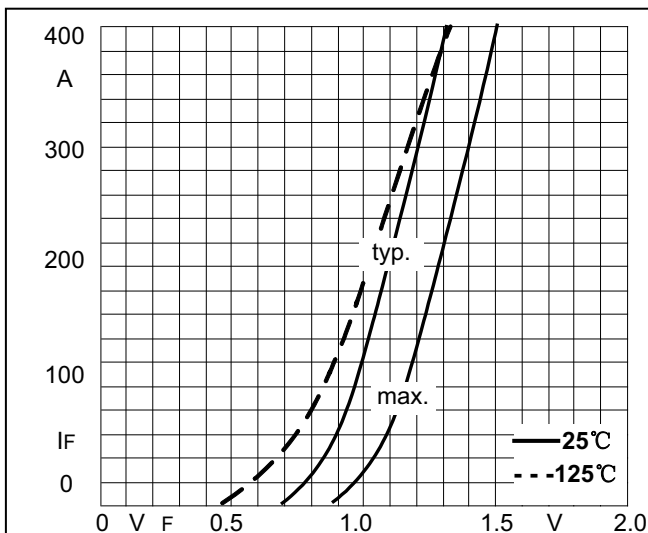
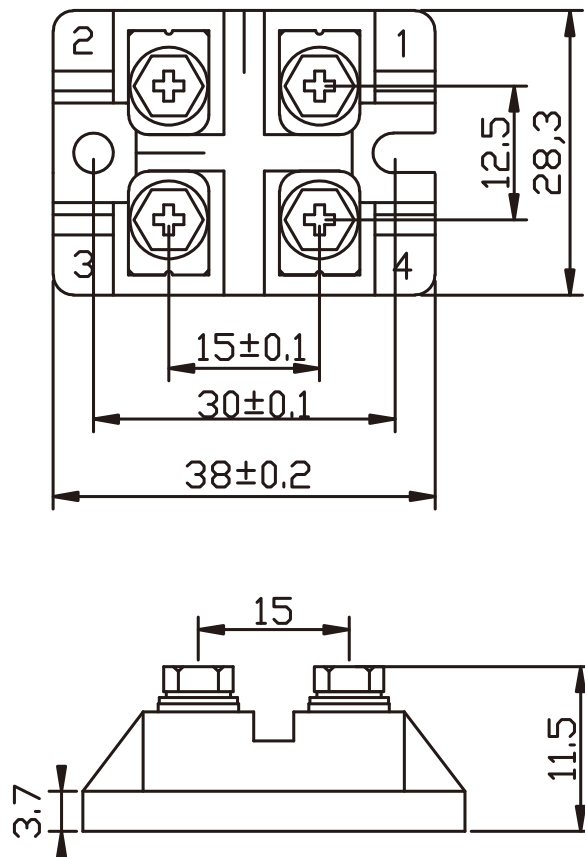


Fig5. Forward Characteristics

Package Outline



Dimensions (mm)