



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

产品规格书

Specification of products

产品名称：肖特基二极管

产品型号：MBK400U2K2

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

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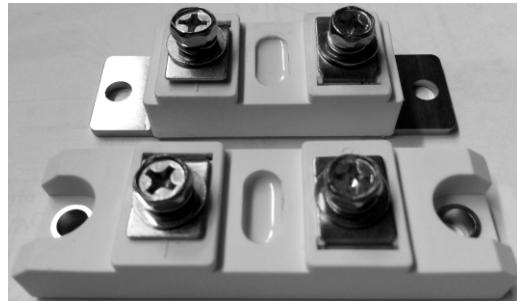
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拟制	审核	核准
林益龙	曹剑龙	宗瑞

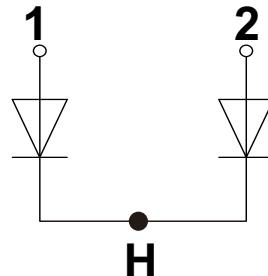
PRODUCT FEATURES

- ☒ Ultrafast Reverse Recovery Time
- ☒ Soft Reverse Recovery Characteristics
- ☒ Low Reverse Recovery Loss
- ☒ Low Forward Voltage
- ☒ High Surge Current Capability
- ☒ Low Inductance Package



APPLICATIONS

- ☒ Inversion Welder
- ☒ Uninterruptible Power Supply
- ☒ Plating Power Supply
- ☒ Ultrasonic Cleaner and Welder
- ☒ Converter & Chopper
- ☒ Power Factor Correction (PFC) Circuit



ABSOLUTE MAXIMUM RATINGS

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

Symbol	Parameter	Test Conditions	Values	Unit
V_R	Maximum D.C. Reverse Voltage		200	V
V_{RRM}	Maximum Repetitive Reverse Voltage		200	V
$I_{F(AV)}$	Average Forward Current	$T_c=110^\circ\text{C}$, Per Diode	200	A
		$T_c=110^\circ\text{C}$, Per Moudle	400	A
$I_{F(RMS)}$	RMS Forward Current	$T_c=110^\circ\text{C}$, Per Diode	220	A
I_{FSM}	Non-Repetitive Surge Forward Current	$T_J=45^\circ\text{C}$, $t=10\text{ms}$, 50Hz, Sine	2000	A
		$T_J=45^\circ\text{C}$, $t=8.3\text{ms}$, 60Hz, Sine	2050	A
I^2t	I^2t (For Fusing)	$T_J=45^\circ\text{C}$, $t=10\text{ms}$, 50Hz, Sine	11250	A^2s
		$T_J=45^\circ\text{C}$, $t=8.3\text{ms}$, 60Hz, Sine	11226	A^2s
P_D	Power Dissipation		285	W
T_J	Junction Temperature		-40 to +150	$^\circ\text{C}$
T_{STG}	Storage Temperature Range		-40 to +125	$^\circ\text{C}$
Torque	Module-to-Sink	Recommended (M6)	3~5	N.m
Torque	Module Electrodes	Recommended (M6)	3~5	N.m
R_{gc}	Thermal Resistance	Junction-to-Case, Per Diode	0.17	$^\circ\text{C} / \text{W}$
Weight			92	g

ELECTRICAL CHARACTERISTICS

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

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{RM}	Reverse Leakage Current	$V_R=200\text{V}$	--	--	20	μA
		$V_R=200\text{V}, T_J=125^\circ\text{C}$	--	--	3	mA
V_F	Forward Voltage	$I_F=5\text{A}$	--	0.60	0.7	V
		$I_F=200\text{A}, T_J=125^\circ\text{C}$	--	0.88	--	V

Packag Outlines

