

## 产品规格书

### Specification of products

产品名称:螺旋型晶闸管

产品型号: KP100A

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拟制	审核	核准
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SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (C)	VALUE			UNIT
				Min	Type	Max	
I <sub>T(AV)</sub>	Mean on-state current	180 half sinewave 50Hz single side cooled, T <sub>hs</sub> =55 C	125			168	A
I <sub>T(AV)</sub>	Mean on-state current	180 half sine wave 50Hz single side cooled, T <sub>hs</sub> =80 C	125			100	A
V <sub>DRM</sub> V <sub>RRM</sub>	Repetitive peak on-state voltage Repetitive peak reverse voltage	V <sub>DRM</sub> &V <sub>RRM</sub> tp=10ms V <sub>Dsm</sub> &V <sub>Rsm</sub> = V <sub>DRM</sub> &V <sub>RRM</sub> +100V respectively	125	100		2000	V
I <sub>DRM</sub> I <sub>RRM</sub>	Repetitive peak current	at V <sub>DRM</sub> at V <sub>RRM</sub>	125			30	mA
I <sub>TSM</sub>	Surge on-state current	10ms half sine wave	125			1.9	KA
I <sup>2</sup> T I	<sup>2</sup> T for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>				18 A	<sup>2</sup> s*10 <sup>3</sup>
V <sub>TO</sub>	Threshold voltage		125			1.36	V
r <sub>T</sub>	On-state slop resistance					1.28	mΩ
V <sub>TM</sub>	Peak on-state voltage I	T <sub>M</sub> =300A	125			2.0	V
dv/dt	Critical rate of rise of off-state voltage	V <sub>DM</sub> =0.67V <sub>DRM</sub>	125			500	V/μs
di/dt	Critical rate of rise of on-state current	From 67%V <sub>DRM</sub> to 1000A, Gate source 1.5A t <sub>r</sub> ≤ 0.5μs Repetitive	125			100	A/μs
I <sub>rm</sub>	Reverse recovery current					90	A
t <sub>rr</sub>	Reverse recovery time	I <sub>TM</sub> =500A, tp=1000 s, di/dt=-20A/s, v <sub>r</sub> =50V	125			8	s
Q <sub>rr</sub>	Recovery charge					360	C
I <sub>GT</sub>	Gate trigger current			10		200	mA
V <sub>GT</sub>	Gate trigger voltage	V <sub>A</sub> =12V, I <sub>A</sub> =1A	25	0.8		2.7	V
I <sub>H</sub>	Holding current			10		200	mA
V <sub>GD</sub>	Non-trigger gate voltage	At 67%V <sub>DRM</sub>	125			0.3	V
R <sub>th(j-h)</sub>	Thermal resistance Junction to heatsink	At 180° sine single side cooled Clamping torque 17 N m				0.200	C/W
F <sub>m</sub>	Mounting torque			13		19	N m
T <sub>stg</sub>	Stored temperature			-40		140	C
Outline	T2						

### Outline

