

■ 主要用途

单向可控硅,用于过压保护、马达控制、限流电路、加热控制等。

■ 极限值 (T_j=25℃)

T _{stg} —— 贮存温度	-40~150℃
T _j —— 结温	-40~125℃
V _{DRM} —— 重复峰值断态电压	800V
I _T (RMS) —— RMS通态电流 (均方值)	20A
I _{T(AV)} —— 平均通态电流 (半正弦波, T _c =109℃)	13A
I _{TSM} —— 浪涌通态电流(1/2周期,50Hz, 正弦波,不重复)	220A
V _{RGM} —— 反向峰值门极电压	5V
I _{FGM} —— 正向峰值门极电流	5.0A
P _{G(AV)} —— 峰值门极功耗.....	20W

■ 外形图及引脚排列

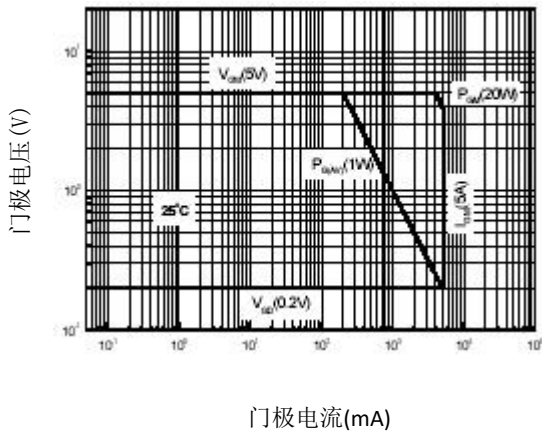


■ 电参数 (T_c=25℃)

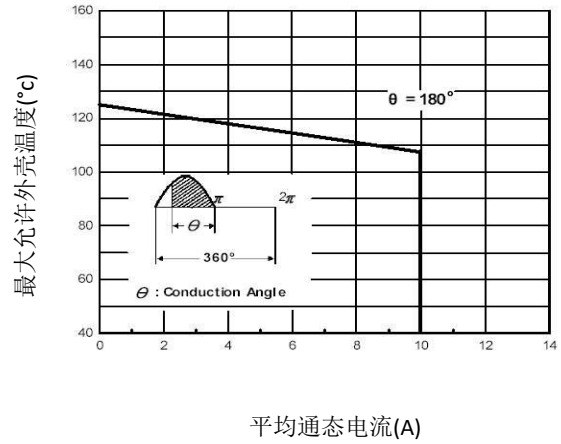
参数符号	符号说明	最小值	典型值	最大值	单位	测试条件
I _{DRM}	重复峰值断态电流	--	--	10 200	uA uA	V _{AK} =V _{DRM} 或 V _{RRM} , T _c =25℃ T _c =125℃
V _{TM}	峰值通态电压(1)	--	--	1.6	V	I _{TM} =40A, tp=380us
I _{GT}	门极触发电流(2)	--	--	15	mA	V _{AK} =6V (DC), R _L =10 ohm T _c =25℃
V _{GT}	门极触发电压(2)	--	--	1.5	V	V _{AK} =6V (DC), R _L =10 ohm T _c =25℃
V _{GD}	门极不触发电压(1)	0.2	--	--	V	V _{AK} =12V, R _L =100 ohm T _c =125℃
I _H	维持电流	--	--	30	mA	I _T =100mA, 栅极开路 T _c =25℃
	最低电压上升率	200	--	--	V/us	线性倾斜上升至V _D =V _{DRM} 67%, 栅极开路, T _j =125℃
R _{th(j-c)}	热阻	--	--	1.1	℃/W	结到外壳
R _{th(j-a)}	热阻	--	--	60	℃/W	结到环境

特性曲线

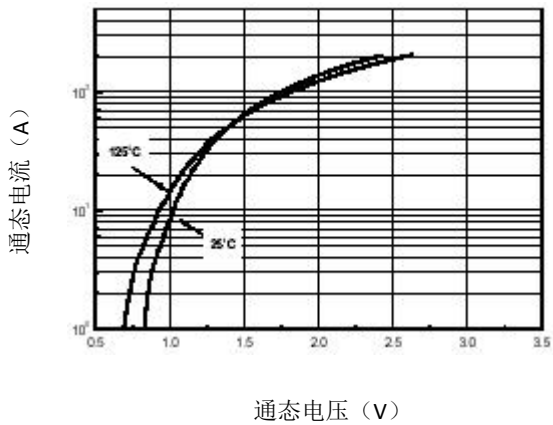
图一、门极特性



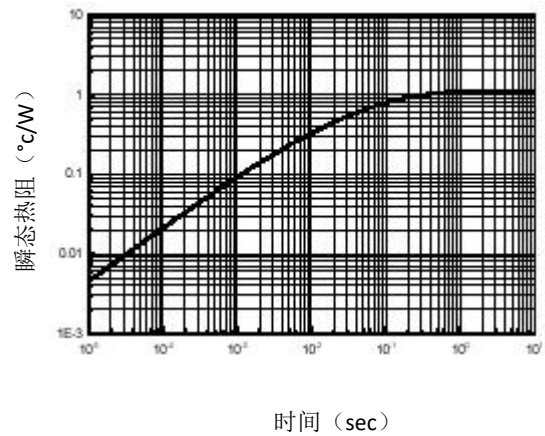
图二、最大外壳温度



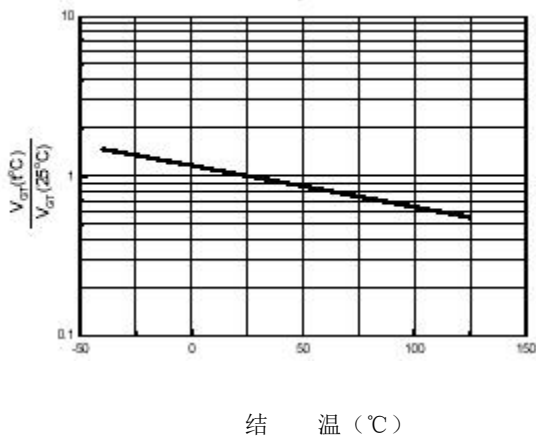
图三、典型正向压降



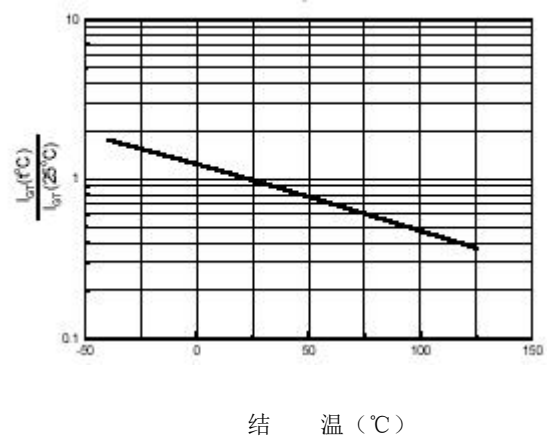
图四、热响应



图五、典型门极触发电压---结温

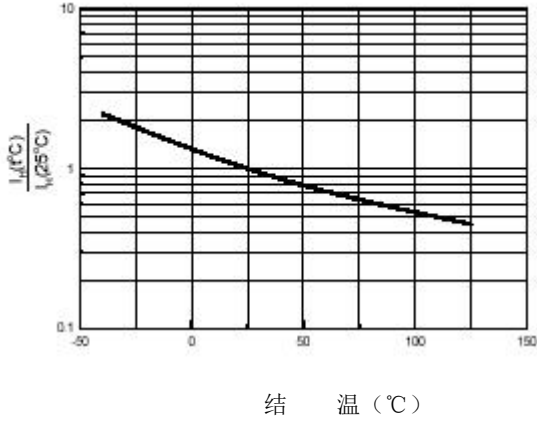


图六、典型门极触发电流---结温

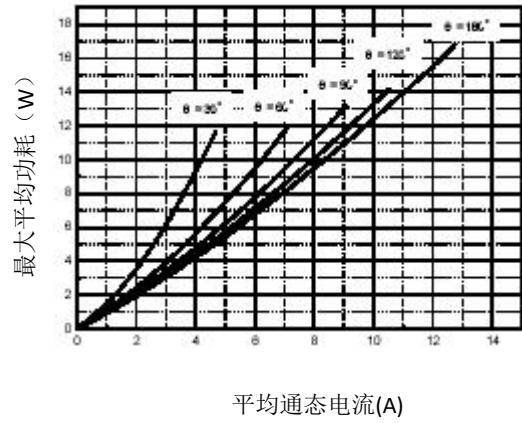


■ 特性曲线

图七、典型维持电流



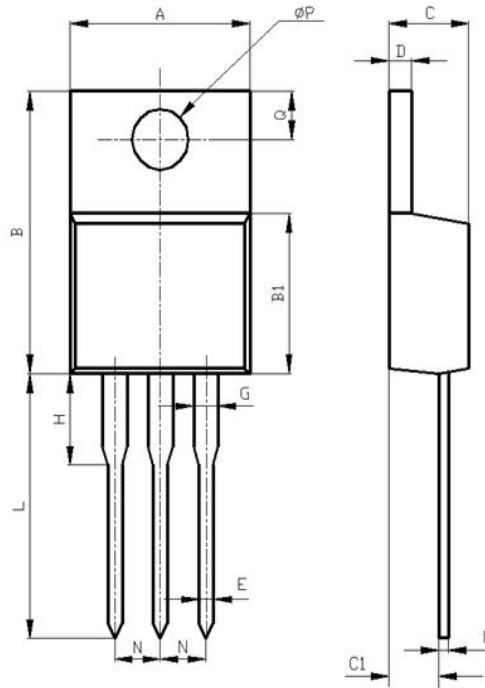
图八、功耗



注:

- 1、脉冲宽度等于1.0ms, 占空因数小于等于1%
- 2、测量时不包括 R_{GK} 电流

Package Description



Items	Values(mm)	
	MIN	MAX
A	9.60	10.6
B	15.0	16.0
B1	8.90	9.50
C	4.30	4.80
C1	2.30	3.10
D	1.20	1.40
E	0.70	0.90
F	0.30	0.60
G	1.17	1.37
H	2.70	3.80
L	12.6	14.8
N	2.34	2.74
Q	2.40	3.00
ϕP	3.50	3.90

TO-220 Package

NOTE:

1. Exceeding the maximum ratings of the device in performance may cause damage to the device, even the permanent failure, which may affect the dependability of the machine. Please do not exceed the absolute maximum ratings of the device when circuit designing.
2. When installing the heat sink, please pay attention to the torsional moment and the smoothness of the heat sink.
3. MOSFETs is the device which is sensitive to the static electricity, it is necessary to protect the device from being damaged by the static electricity when using it.
4. Shenzhen Minos reserves the right to make changes in this specification sheet and is subject to change without prior notice.

CONTACT:

深圳市迈诺斯科技有限公司（总部）

地址：深圳市福田区华富街道田面社区深南中路4026号田面城市大厦16D

邮编：518025

电话：0755-83273777