



浙江芯芯电子有限公司
ZHEJIANG XINXIN ELECTIRICAL CO., LTD.

产品规格书

Specification of Products

产品名称：可控硅模块

产品型号：MTC110A

浙江芯芯电子有限公司

ZHEJIANG XINXIN ELECTIRICAL CO., LTD.

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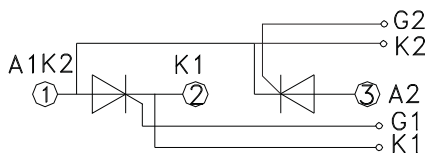
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| 丁国盛 | 李园利 | 麻伟阳 |

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| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | T _j (°C) | VALUE | | | UNIT |
|--------------------------------------|---|---|---------------------|-------|------|-------|----------------------------------|
| | | | | Min | Type | Max | |
| I _{T(AV)} | Mean on-state current | 180° half sinewave 50Hz Single side cooled, T _j =85°C | 125 | | | 110 | A |
| I _{T(RMS)} | RMS on-state current | Single side cooled, T _j =85°C | 125 | | | 173 | A |
| V _{DRM} V _{RRM} | Repetitive peak on-state voltage Repetitive peak reverse voltage | V _{DRM} &V _{RRM} tp=10ms V _{DsM} &V _{RSM} = V _{DRM} &V _{RRM} +200V respectively | 125 | | 1200 | | V |
| I _{DRM} I _{RRM} | Repetitive peak current | at V _{DRM} at V _{RRM} | 125 | | | 12 | mA |
| I _{TSM} | Surge on-state current | 10ms half sinewave | 125 | | | 2.40 | KA |
| I ² t | I ² T for fusing coordination | V _R =60%V _{RRM} | | | | 29.3 | A ² s*10 ³ |
| V _{TO} | Threshold voltage | | 125 | | | 0.8 | V |
| r _T | On-state slop resistance | | | | | 2.29 | mΩ |
| V _{TM} | Peak on-state voltage | I _{TM} =330A | 125 | | | 1.4 | V |
| dv/dt | Critical rate of rise of off-state voltage | V _{DM} =67%V _{DRM} | 125 | | | 500 | V/μs |
| di/dt | Critical rate of rise of on-state current | From 67%V _{DRM} to 330A, Gate source 1.5A t _r ≤ 0.5 μs Repetitive | 125 | | | 100 | A/μs |
| I _{GT} | Gate trigger current | | | 30 | | 100 | mA |
| V _{GT} | Gate trigger voltage | V _A =12V, I _A =1A | 25 | 0.8 | | 1.8 | V |
| I _H | Holding current | | | 20 | | 100 | mA |
| V _{GD} | Non-trigger gate voltage | At 67%V _{DRM} | 125 | | | 0.2 | V |
| R _{th(j-c)} | Thermal resistance Junction to heatsink | At 180° sine Single side cooled | | | | 0.250 | °C /W |
| V _{iso} | Isolation voltage | 50Hz, RM. S, t=1min, i _{so} : 1mA MAX) | | 2500 | | | V |
| F _m | Thermal connection torque(M5) | | | | 2.0 | | N.m |
| | Mounting torque(M6) | | | | 3.0 | | N.m |
| T _{stg} | Stored temperature | | | -40 | | 140 | °C |
| W _i | Weight | | | | 154 | | g |
| Outline | | | | | | | |

OUTLINE DRAWING & CIRCUIT DIAGRAM

MTC:



Rating and Characteristic

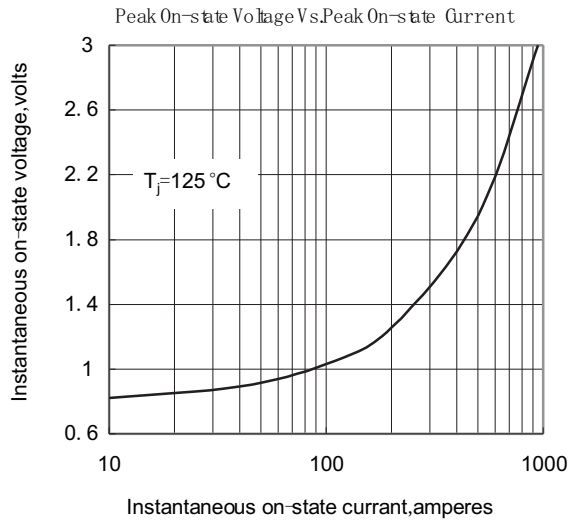


Fig. 1

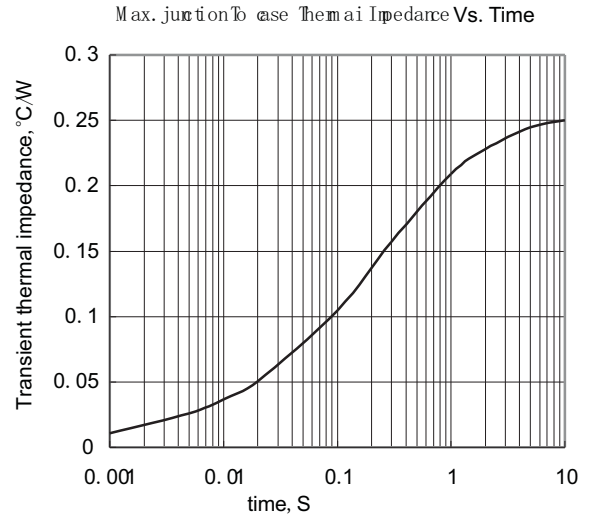


Fig. 2

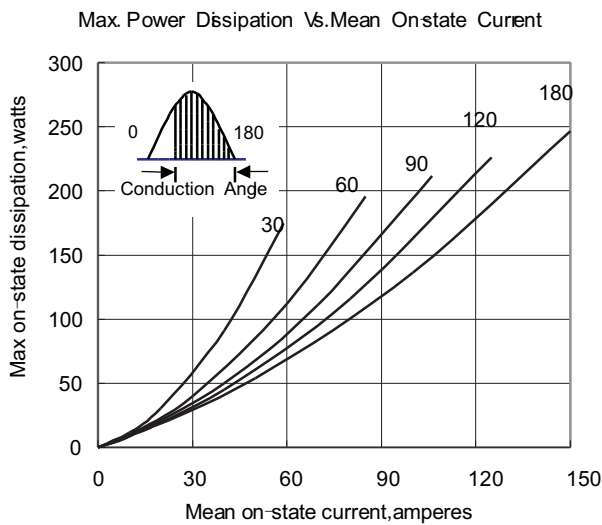


Fig. 3

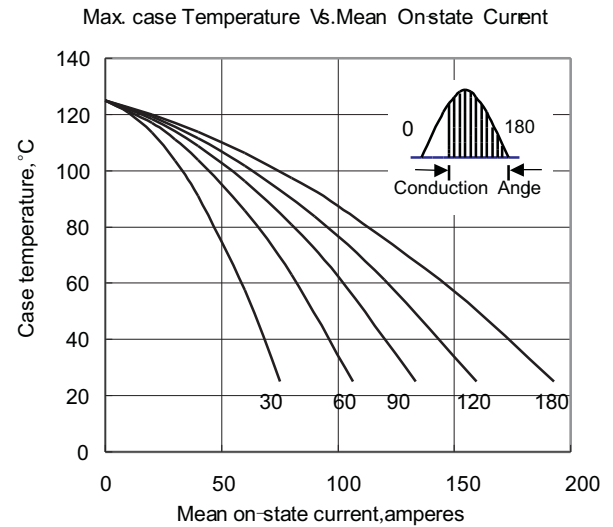


Fig. 4

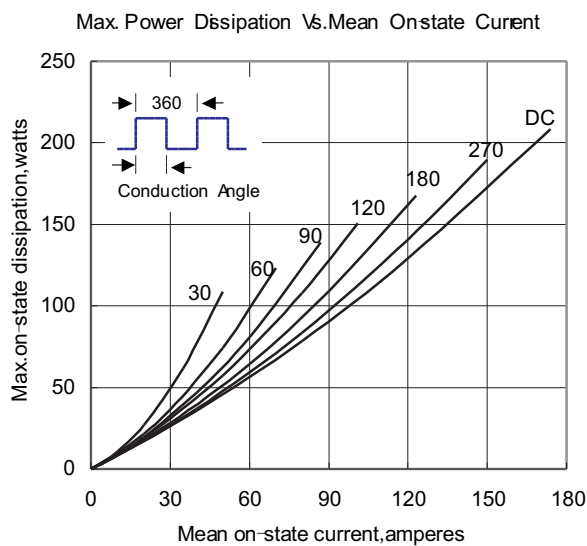


Fig. 5

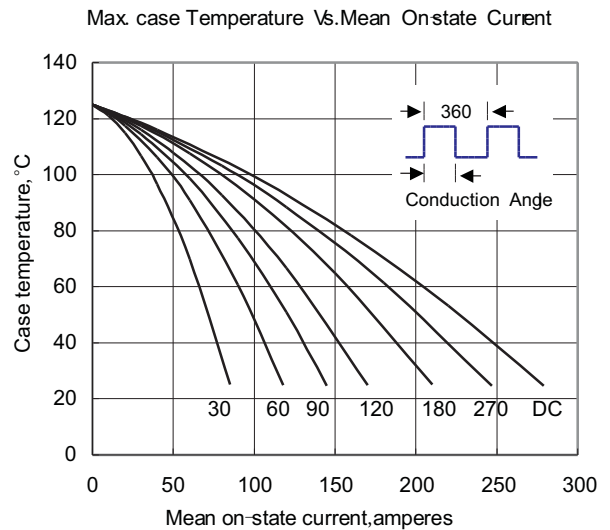


Fig. 6

Rating and Characteristic

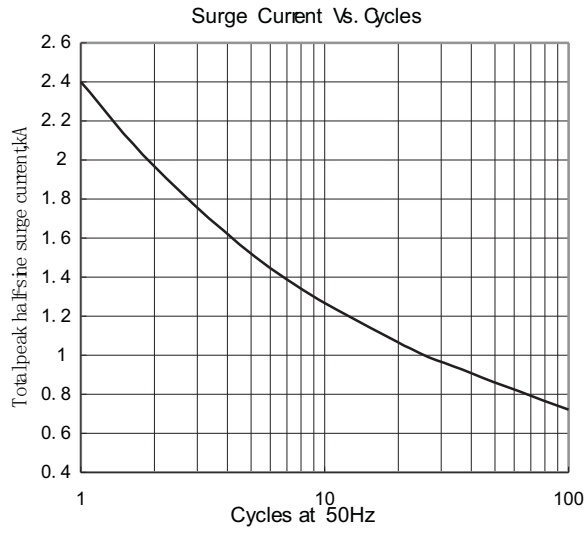


Fig. 7

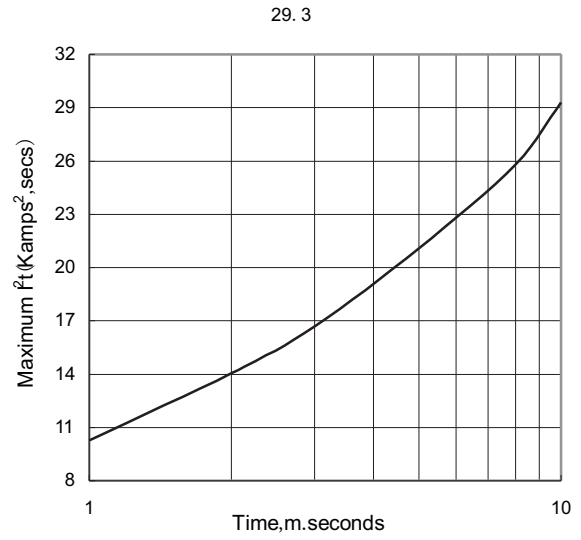


Fig. 8

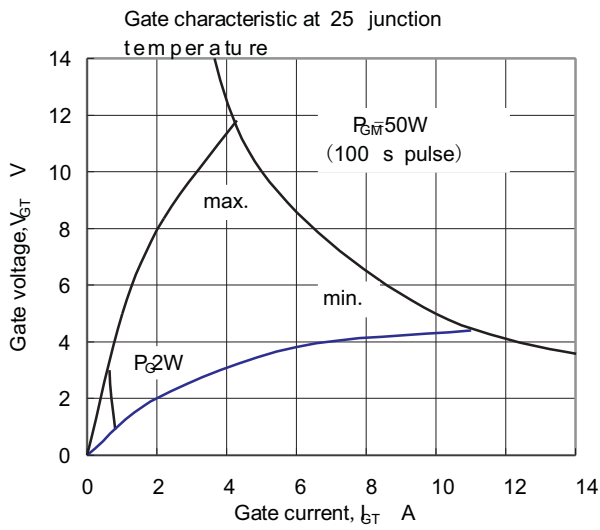


Fig. 9

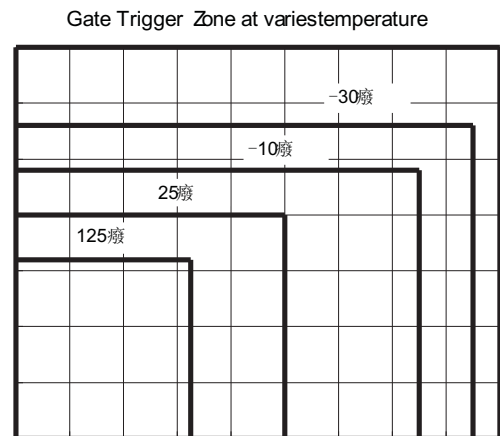


Fig. 10

Outside Dimension

