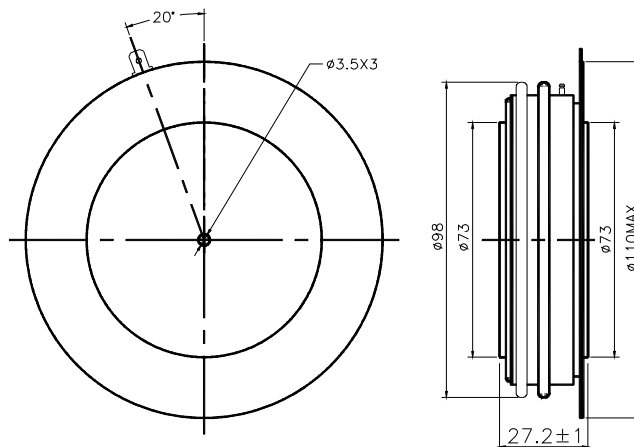


T25-XX00
PHASE CONTROL
THYRISTOR

| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | T _j (°C) | VALUE | | | UNIT |
|--------------------------------------|--|---|---------------------|-------|------|-------|----------------------------------|
| | | | | Min | Type | Max | |
| I _{T(AV)} | Mean on-state current | 180° half sine wave 50Hz Double side cooled, T _{hs} =55°C | 125 | | | 3013 | A |
| I _{T(AV)} | Mean on-state current | 180° half sine wave 50Hz Double side cooled, T _{hs} =80°C | 125 | | | 2240 | A |
| V _{DRM} V _{RRM} | Repetitive peak off-state voltage Repetitive peak reverse voltage | V _{DRM} &V _{RRM} tp=10ms V _{Dsm} &V _{Rsm} = V _{DRM} &V _{RRM} +100V respectively | 125 | 1900 | | 2600 | V |
| I _{DRM} I _{RRM} | Repetitive peak current | at V _{DRM} at V _{RRM} | 125 | | | 200 | mA |
| I _{TSM} | Surge on-state current | 10ms half sine wave | 125 | | | 32 | KA |
| I ² T | I ² T for fusing coordination | V _R =0.6V _{RRM} | | | | 5120 | A ² s*10 ³ |
| V _{TO} | Threshold voltage | | 125 | | | 1.0 | V |
| r _T | On-state slop resistance | | | | | 0.15 | mΩ |
| V _{TM} | Peak on-state voltage | I _{TM} =5000A, F=40KN | 125 | | | 1.77 | V |
| dv/dt | Critical rate of rise of off-state voltage | V _{DM} =0.67V _{DRM} | 125 | | | 500 | V/μs |
| di/dt | Critical rate of rise of on-state current | From 67%V _{DRM} to 2000A, Gate source 1.5A t _r ≤0.5μs Repetitive | 125 | | | 400 | A/μs |
| I _{rm} | Reverse recovery current | | | | | 250 | A |
| t _{rr} | Reverse recovery time | I _{TM} =1500A, tp=1000μs, di/dt=-20A/μs, V _r =50V | 125 | | | 26 | μs |
| Q _{rr} | Recovery charge | | | | | 3250 | μC |
| I _{GT} | Gate trigger current | | | 40 | | 300 | mA |
| V _{GT} | Gate trigger voltage | V _A =12V, I _A =1A | 25 | 0.8 | | 3.0 | V |
| I _H | Holding current | | | 20 | | 300 | mA |
| V _{GD} | Non-trigger gate voltage | At 67%V _{DRM} | 125 | | | 0.3 | V |
| R _{th(j-h)} | Thermal resistance Junction to heatsink | At 180° sine' double side cooled Clamping force 40KN | | | | 0.011 | °C /W |
| F _m | Mounting force | | | 35 | | 47 | KN |
| T _{stg} | Stored temperature | | | -40 | | 140 | °C |
| W _t | Weight | | | | 1100 | | g |
| Outline | KT73cT | | | | | | |

Outline



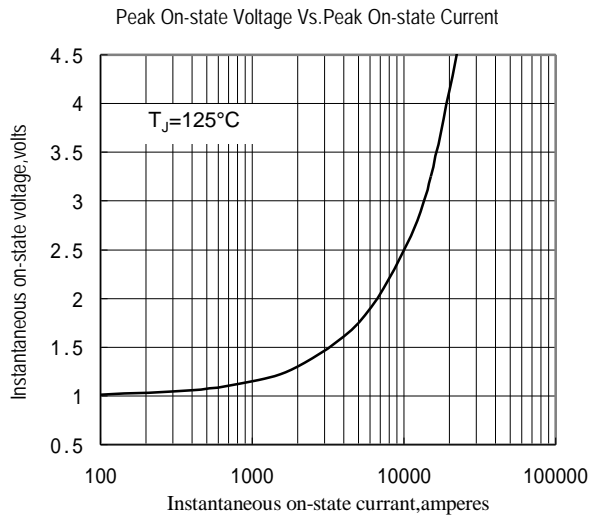


Fig.1

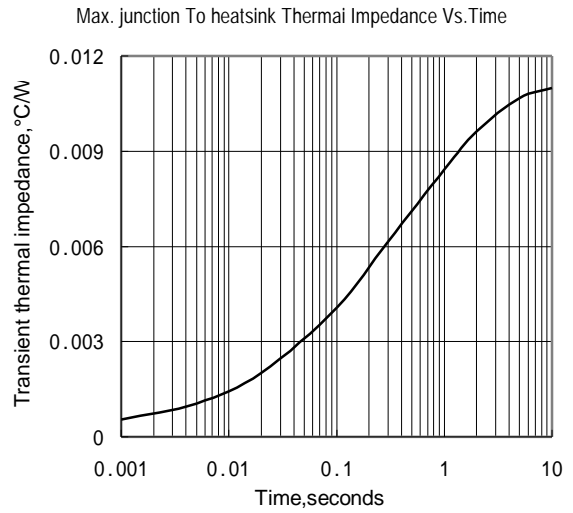


Fig.2

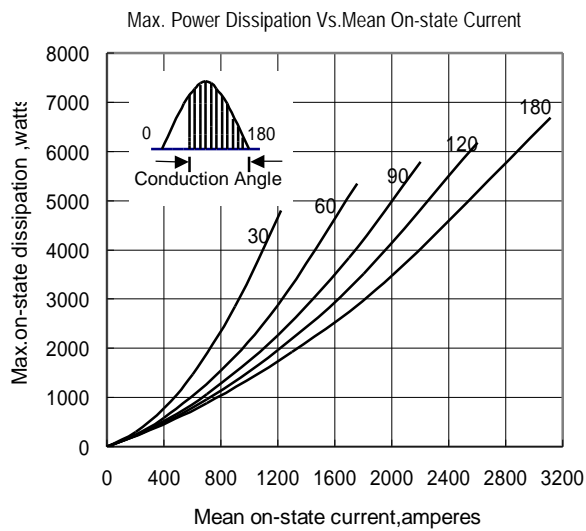


Fig.3

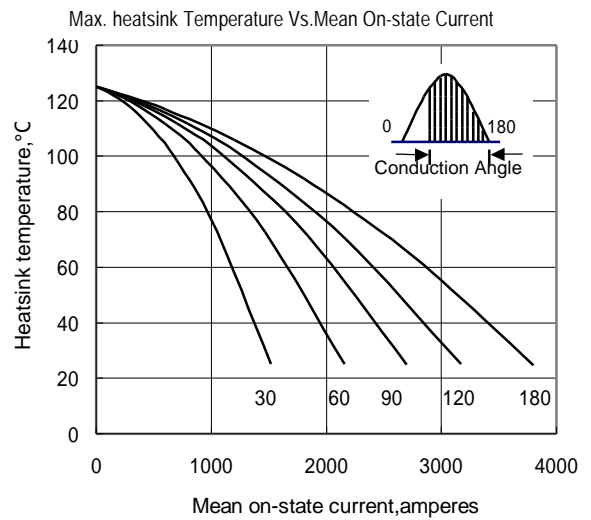


Fig.4

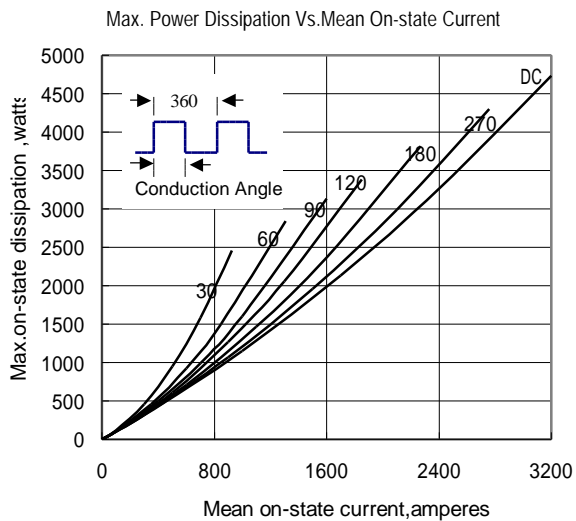


Fig.5

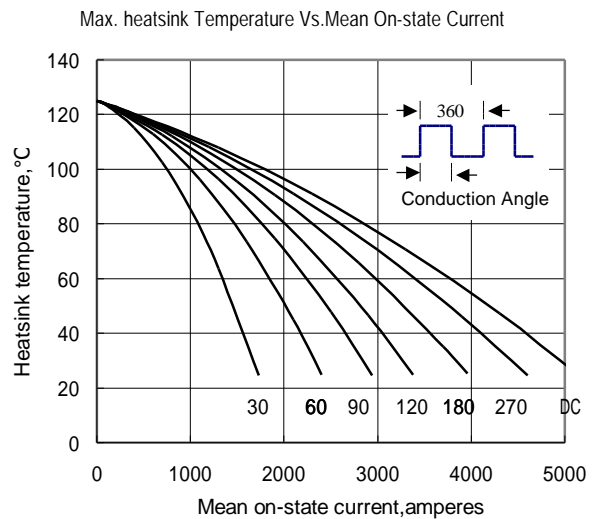


Fig.6

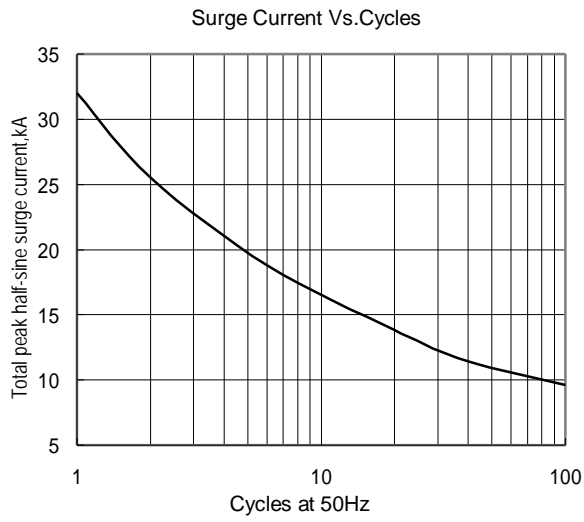


Fig.7

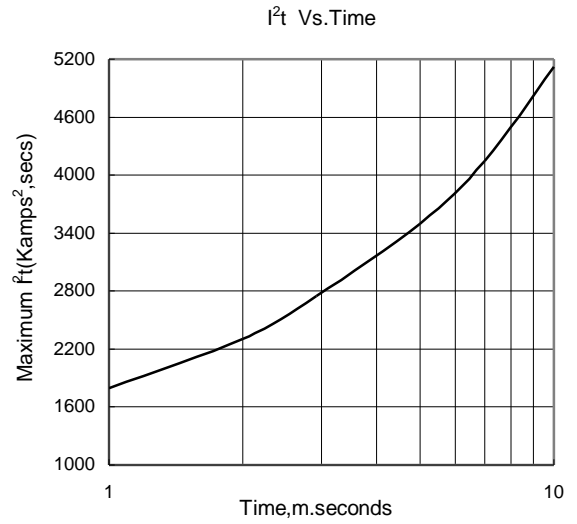


Fig.8

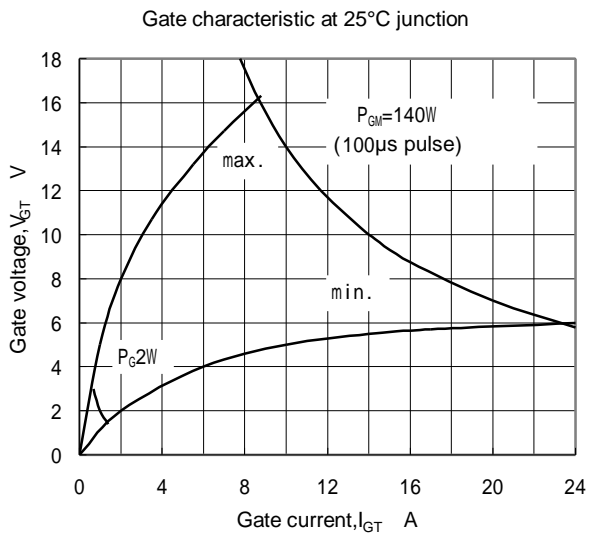


Fig.9

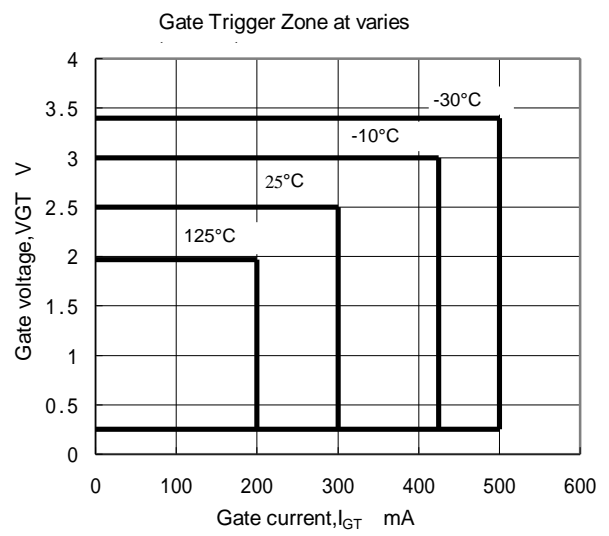


Fig.10