

H12-XX00
 HIGH FREQUENCY
 INVERTER 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 | 115 | | | 1343 | A |
| I _{T(AV)} | Mean on-state current | 180° half sine wave 50Hz Double side cooled, T _{HS} =80°C | 115 | | | 895 | 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 | 115 | 800 | | 1200 | V |
| I _{DRM} I _{RRM} | Repetitive peak current | at V _{DRM} at V _{RRM} | 115 | | | 100 | mA |
| I _{TSM} | Surge on-state current | 10ms half sine wave | 115 | | | 14 | KA |
| I ² T | I ² T for fusing coordination | V _R =0.6V _{RRM} | | | | 980 | A ² s*10 ³ |
| V _{TO} | Threshold voltage | | 115 | | | 1.27 | V |
| r _T | On-state slop resistance | | | | | 0.23 | mΩ |
| V _{TM} | Peak on-state voltage | I _{TM} =3000A, F=26KN | 115 | | | 1.96 | V |
| dv/dt | Critical rate of rise of off-state voltage | V _{DM} =0.67V _{DRM} | 115 | | | 500 | V/μs |
| di/dt | Critical rate of rise of on-state current | From 67%V _{DRM} to 1500A, Gate source 1.5A t _r ≤0.5μs Repetitive | 115 | | | 600 | A/μs |
| I _{rm} | Reverse recovery current | I _{TM} =800A, tp=1000μs, di/dt=-40A/μs, V _R =50V | 115 | | 60 | | A |
| t _{rr} | Reverse recovery time | | | | 3.0 | | μs |
| Q _{rr} | Recovery charge | | | | 90 | 110 | μC |
| t _q | Circuit commutated turn-off time | I _{TM} =800A, tp=1000μs, V _R =50V dv/dt=30V/μs ,di/dt=-40A/μs | 115 | 8 | | 15 | μs |
| I _{GT} | Gate trigger current | V _A =12V, I _A =1A | 25 | 30 | | 300 | mA |
| V _{GT} | Gate trigger voltage | | | 0.8 | | 3.0 | V |
| I _H | Holding current | | | 20 | | 400 | mA |
| V _{GD} | Non-trigger gate voltage | At 67%V _{DRM} | 115 | | | 0.3 | V |
| R _{th(j-h)} | Thermal resistance Junction to heatsink | At 180° sine double side cooled Clamping force 26KN | | | | 0.022 | °C /W |
| F _m | Mounting force | | | 21 | | 30 | KN |
| T _{stg} | Stored temperature | | | -40 | | 140 | °C |
| W _t | Weight | | | | 620 | | g |
| Outline | KT54cT55 | | | | | | |

Outline

