

ELECTRICAL PARAMETERS**Voltage ratings**

| Voltage class | U_{RRM} | U_{RSM} | I_{RRM} |
|---------------|-----------|-----------|-----------|
| | V | V | mA |
| 04 | 400 | 500 | 30 |
| 06 | 600 | 700 | |
| 08 | 800 | 900 | |
| 10 | 1000 | 1100 | |
| 12 | 1200 | 1300 | |
| 14 | 1400 | 1500 | |
| 16 | 1600 | 1700 | |

du/dt group codes

| Group code | du/dt |
|------------|--------------------|
| | V/ μ s |
| 0 | no specified value |
| 5 | 320 |
| 6 | 500 |
| 7 | 1000 |

Electrical properties

| Parameter | Unit | Test conditions | Value |
|---|--------------|------------------------|---|
| Average on-state current | $I_{T(AV)}$ | A | 300 |
| Case temperature | T_c | °C | 85 |
| RMS on-state current | $I_{T(RMS)}$ | A | 470 |
| Surge current | I_{TSM} | A | $T_j=125^\circ\text{C}$, $U_R=0,8U_{RRM}$, $t_p=10\text{ms}$ |
| I^2t – value | I^2t | kA^2s | 320 |
| On-state voltage max. | U_{TM} | V | $T_j=25^\circ\text{C}$, $I_{TM}=1500\text{A}$ |
| Threshold voltage | $U_{T(T0)}$ | V | 0,70 |
| Slope resistance | r_T | $\text{m}\Omega$ | 0,55 |
| Latching current | I_L | mA | $T_j=25^\circ\text{C}$, $U_D=12\text{V}$ |
| Holding current | I_H | mA | $T_j=25^\circ\text{C}$, $U_D=12\text{V}$ |
| Circuit commutated turn-off time (typical) | t_q | μs | $T_j=125^\circ\text{C}$, $I_{TM}=250\text{A}$, $di_R/dt=25\text{A}/\mu\text{s}$, $du/dt=20\text{V}/\mu\text{s}$, $U_D=0,67U_{DRM}$, $U_{RM}=100\text{V}$ |
| Turn-On time (typical) | t_{gt} | μs | $I_{TM}=100\text{A}$, $U_{DM}=100\text{V}$ |
| Rate of rise of on-state current-repetitive | di/dt | $\text{A}/\mu\text{s}$ | $T_j=125^\circ\text{C}$, $I_{TM}=3I_{T(AV)}$, $U_D=0,67U_{DRM}$, $f=50\text{Hz}$, $I_{GM}=1\text{A}$, $di_G/dt=1\text{A}/\mu\text{s}$ |
| Critical rate of raise of off-state voltage | du/dt | $\text{V}/\mu\text{s}$ | $T_j=125^\circ\text{C}$, $U_D=0,67U_{DRM}$ |
| Gate current to trigger | I_{GT} | mA | $T_j=25^\circ\text{C}$, $U_D=12\text{V}$ |
| Gate voltage to trigger | U_{GT} | V | $T_j=25^\circ\text{C}$, $U_D=12\text{V}$ |
| RMS isolation voltage | U_{isol} | V | 1s, circuit to base, all terminals shorted |

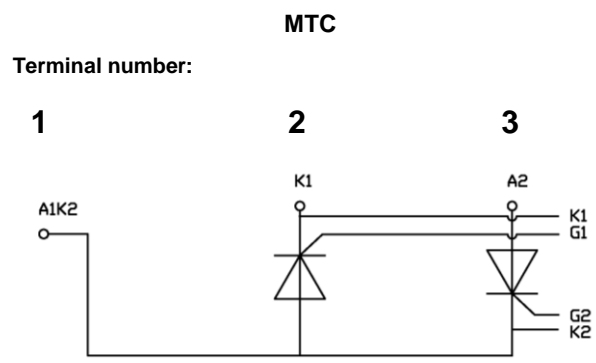
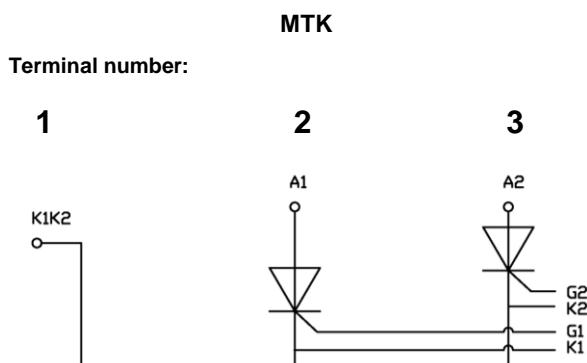
Termal properties

| Parameter | Unit | Test conditions | Value |
|---|-----------------------|-----------------|------------|
| Thermal resistance, junction to case per thyristor/module | R_{thJC} | °C/W | DC |
| Thermal resistance, case to heatsink per thyristor/module | R_{thCh} | °C/W | 0,11/0,055 |
| Operating junction temperature | $T_{jmin}...T_{jmax}$ | °C | 0,04/0,02 |
| Storage temperature | T_{stg} | °C | -40...+125 |

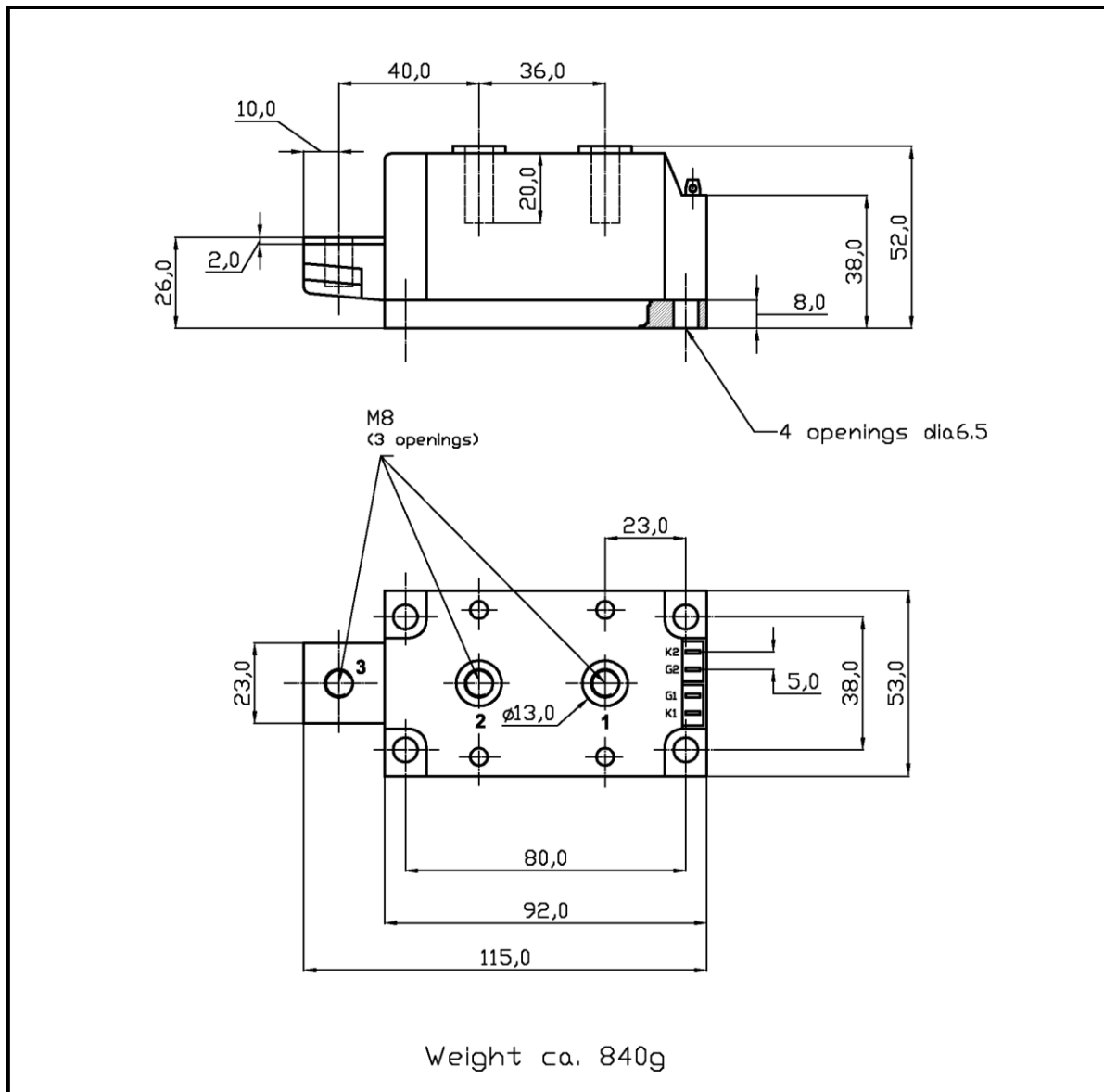
Mechanical properties

| Parameter | | Unit | Value |
|---------------------------------|----|------|------------|
| Mounting torque (M6) | M1 | Nm | 5,00 ±15% |
| Terminal connection torque (M8) | M2 | Nm | 12,00 ±10% |
| Weight | M | g | 840 |

Cofigurations



Package details



For further package information, please contact Sales & Marketing Department. All dimensions in mm, unless stated otherwise.
Do not scale.