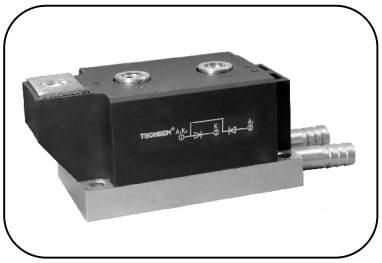


**Features：**

- **n** Isolated mounting base 3000V~
- **n** Pressure contact technology with Increased power cycling capability
- **n** Space and weight saving

**Typical Applications**

- **n** Various rectifiers
- **n** DC supply for PWM inverter

| $V_{RRM}$ | Type & Outline |
|---|---|
| 800V | MDx600-08-406F3 |
| 1000V | MDx600-10-406F3 |
| 1200V | MDx600-12-406F3 |
| 1400V | MDx600-14-406F3 |
| 1600V | MDx600-16-406F3 |
| 1800V | MDx600-18-406F3 |
| 1800V | MD600-18-406F3G |

MDx stands for any type of **MDC, MDA, MDK**

| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | $T_j$(°C) | VALUE | | | UNIT |
|---|---|---|---|---|---|---|---|
| | | | | Min | Type | Max | |
| $I_{F(AV)}$ | Mean forward current | 180° half sine wave 50Hz Single side cooled, $T_C$=60°C | 150 | | | 600 | A |
| $I_{F(RMS)}$ | RMS forward current | | | | | 942 | A |
| $I_{RRM}$ | Repetitive peak current | at $V_{RRM}$ | 150 | | | 40 | mA |
| $I_{FSM}$ | Surge forward current | $V_R$=60%$V_{RRM}$, t=10ms half sine | 150 | | | 16.1 | kA |
| $I^2t$ | $I^2t$ for fusing coordination | | | | | 1296 | $10^3A^2s$ |
| $V_{FO}$ | Threshold voltage | | 150 | | | 0.75 | V |
| $r_F$ | Forward slope resistance | | | | | 0.42 | mΩ |
| $V_{FM}$ | Peak forward voltage | $I_{FM}$=1800A | 25 | | | 1.65 | V |
| $R_{th(j-c)}$ | Thermal resistance Junction to case | Single side cooled per chip | | | | 0.11 | °C/W |
| $R_{th(c-h)}$ | Thermal resistance case to heatsink | Single side cooled per chip | | | | 0.04 | °C/W |
| $V_{iso}$ | Isolation voltage | 50Hz, R.M.S, t=1min, $I_{iso}$:1mA(MAX) | | 3000 | | | V |
| $F_m$ | Terminal connection torque(M12) | | | 12 | | 14 | N·m |
| | Mounting torque(M6) | | | 4.5 | | 6.0 | N·m |
| $T_{vj}$ | Junction temperature | | | -40 | | 150 | °C |
| $T_{stg}$ | Stored temperature | | | -40 | | 125 | °C |
| $W_t$ | Weight | | | | 1580 | | g |
| **Outline** | 406F3 | | | | | | |

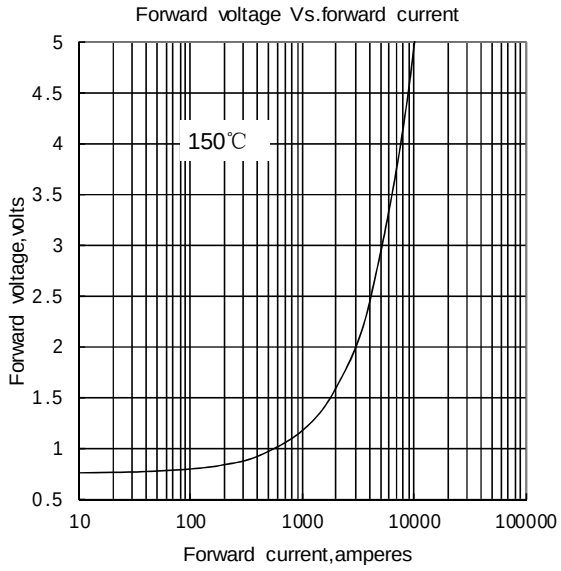



Fig.1

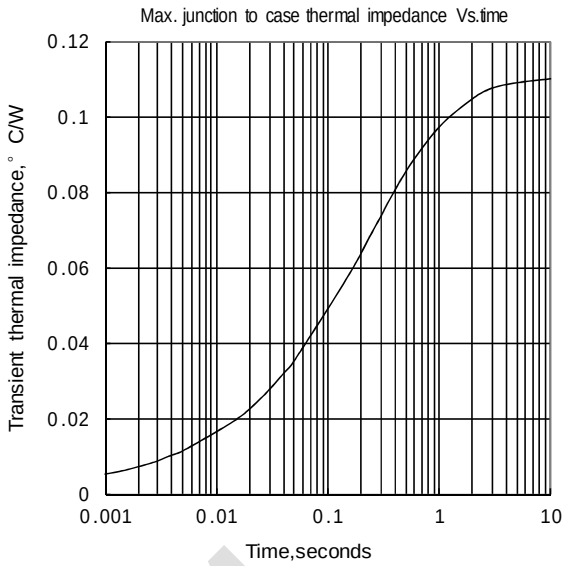



Fig.2

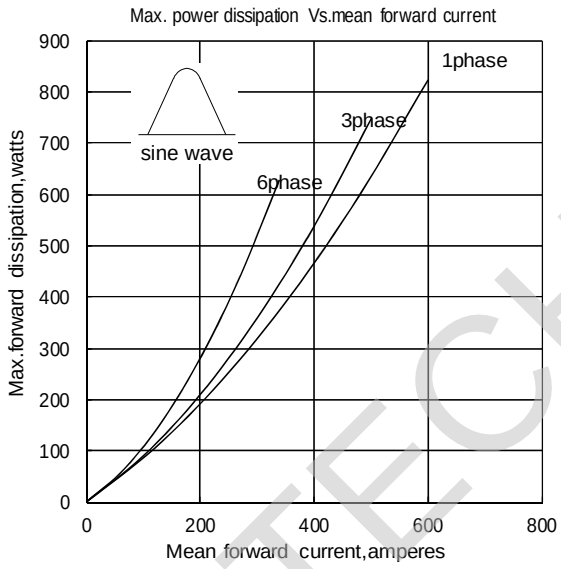



Fig.3

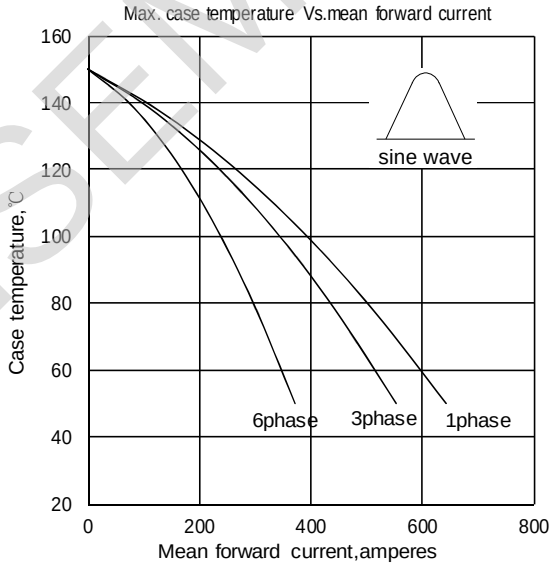



Fig.4

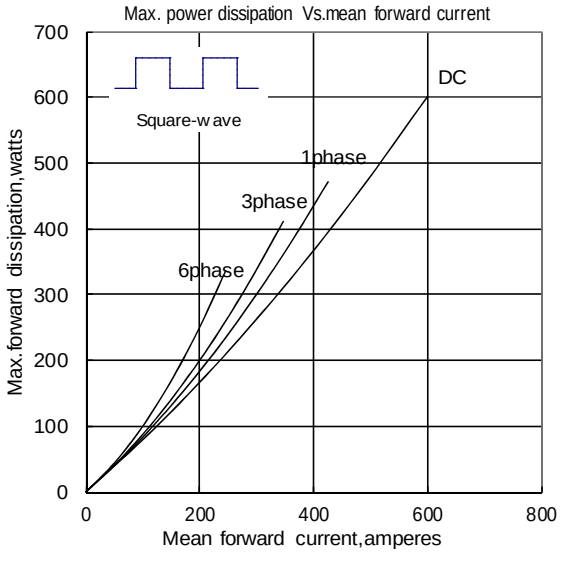



Fig.5

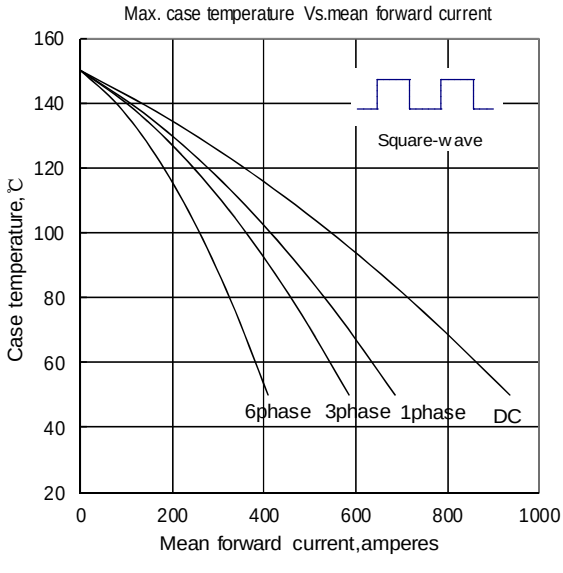



Fig.6

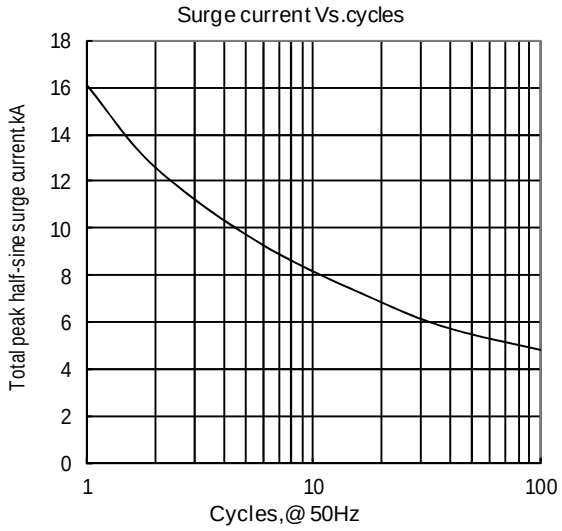



Fig.7

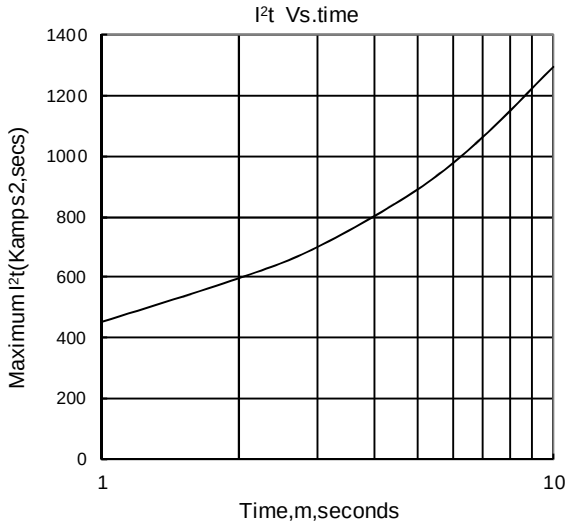
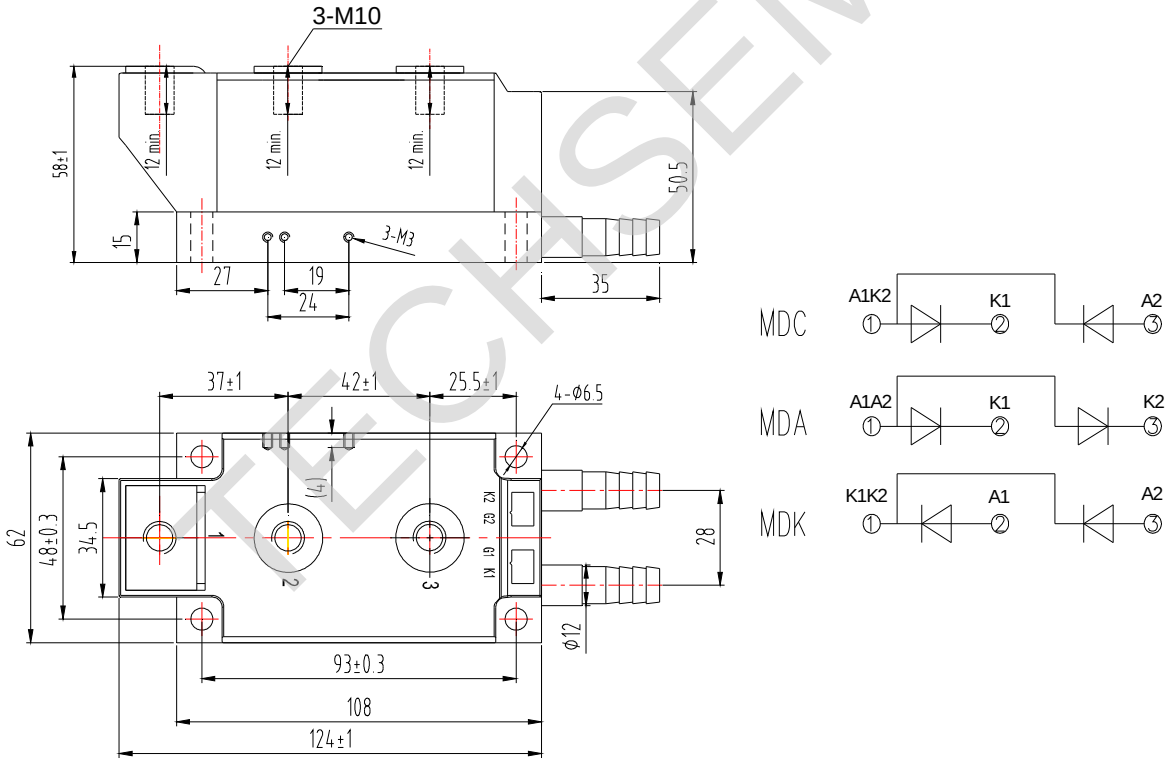



Fig.8

**Outline:**




Unmarked dimensional tolerance：±0.5mm