# MDS50

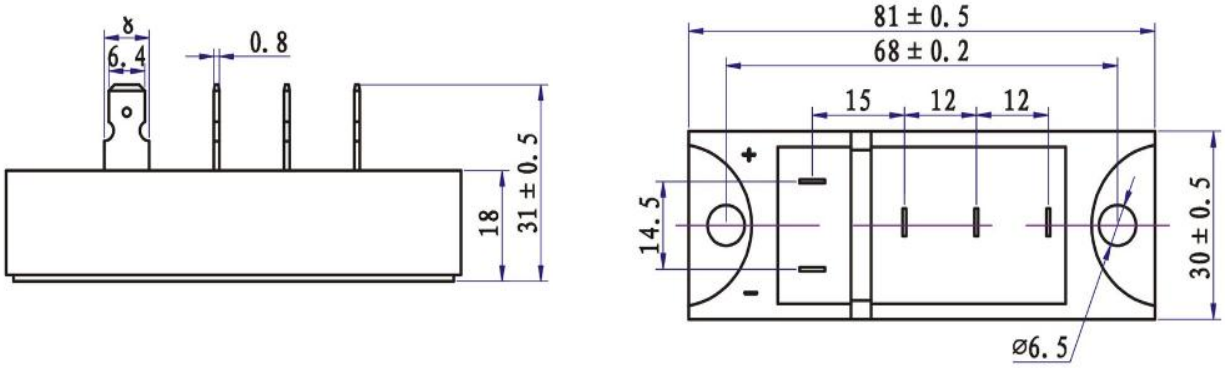
Three Phase Bridge

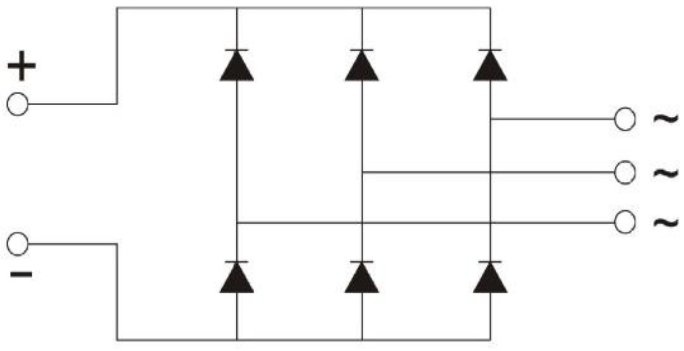
OUTLINE DRAWING

## Specification of Products

| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | Tj(℃) | VALUE | | | UNIT |
|---|---|---|---|---|---|---|---|
| | | | | Min | Type | Max | |
| Io | DC output current | Three-phase full wave rectifying circuit, Tc=100℃ | 150 | | | 50 | A |
| $V_{RRM}$ | Repetitive peak reverse voltage | VRRM tp=10ms VRSM=VDRM&VRRM+200V | 150 | 600 | | 2200 | V |
| $I_{RRM}$ | Repetitive peak current | at VRRM | 150 | | | 6 | mA |
| $I_{FSM}$ | Surge forward current | 10ms half sinewave $V_R$=0.6$V_{RRM}$ | 150 | | | 0.43 | KA |
| $I^2t$ | $I^2t$ for fusing coordination | | | | | 1.1 | $A^2S*10^3$ |
| $V_{F0}$ | Threshold voltage | | 150 | | | 0.8 | V |
| $R_F$ | Forward slop resistance | | | | | 9.8 | mΩ |
| $V_{FM}$ | Peak forward voltage | $I_{FM}$=50A | 25 | | | 1.1 | V |
| $R_{th(j-c)}$ | Thermal resistance Junction to heatsink | Single side cooled | | | | 0.75 | ℃/W |
| $V_{iso}$ | Isolation voltage | 50Hz, RM.S, t=1min $I_{iso}$=1mA(max) | | 2500 | | | V |
| Fm | Terminal connection | | | | | | N.m |
| | Mounting torque (M4) | | | | 1.5 | | N.m |
| $T_{stg}$ | Stored temperature | | | -40 | | 125 | ℃/W |
| $W_t$ | Weight | | | | 108 | | g |

## Outside Dimension




CIRCUIT DIAGRAM

# Rating and Characteristic

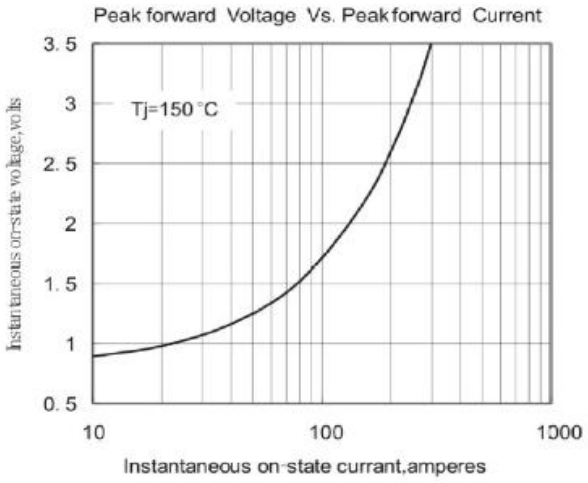



Fig. 1

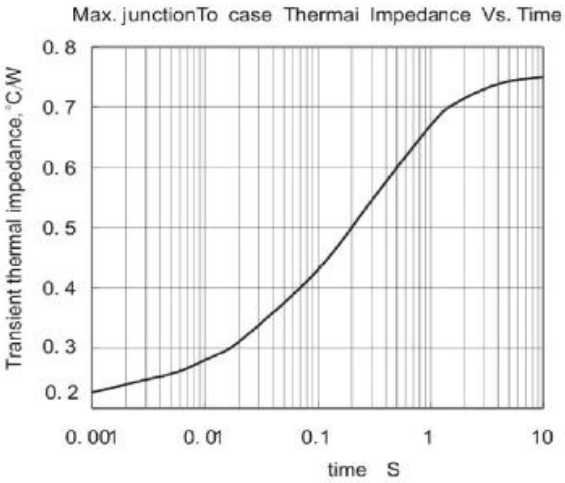



Fig. 2

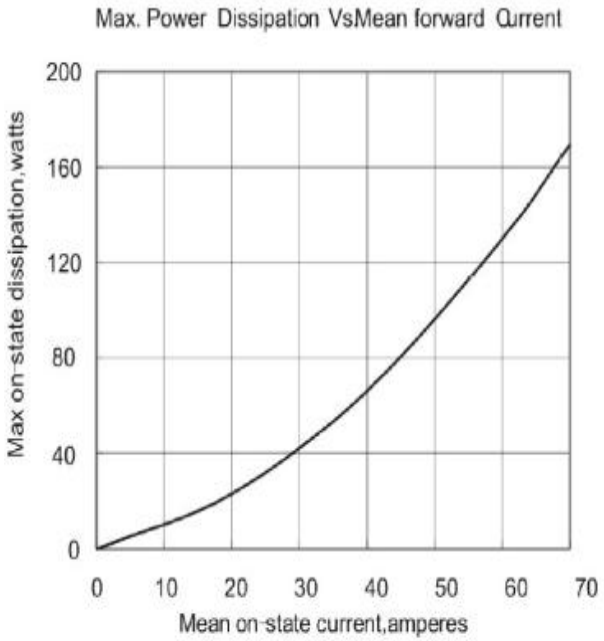



Fig. 3

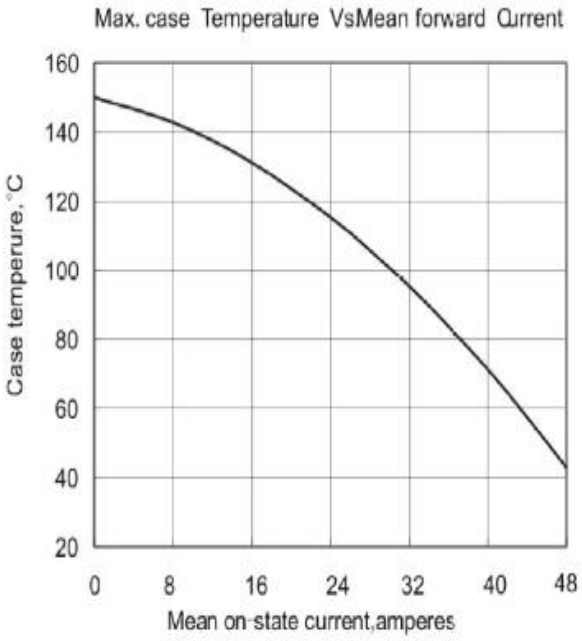



Fig. 4

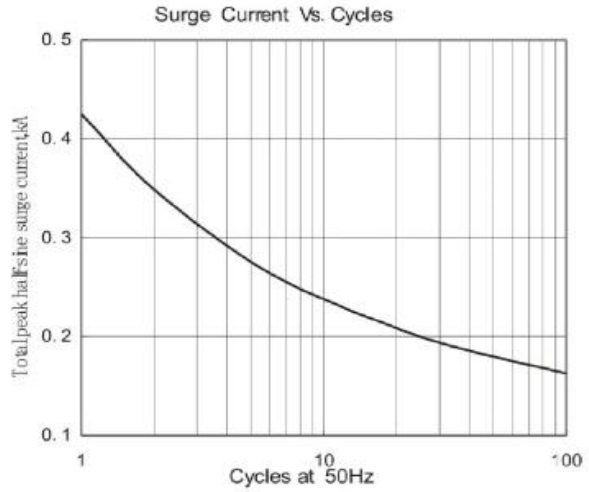



Fig. 5

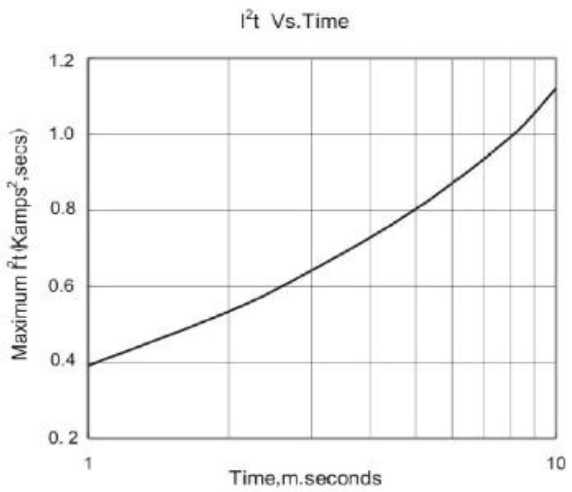



Fig. 6