



## Module Type

| TYPE      | VRRM  | VRSM  |
|-----------|-------|-------|
| MD75S08M2 | 800V  | 900V  |
| MD75S12M2 | 1200V | 1300V |
| MD75S16M2 | 1600V | 1700V |
| MD75S18M2 | 1800V | 1900V |

## Maximum Ratings

| Symbol     | Conditions                       | Values      | Units  |
|------------|----------------------------------|-------------|--------|
| $I_D$      | Three phase, full wave $T_c=110$ | 75          | A      |
| $I_{FSM}$  | $t=10\text{ms}$ $T_{vj}=45$      | 750         | A      |
| $i^2t$     | $t=10\text{ms}$ $T_{vj}=45$      | 2800        | $A^2s$ |
| $V_{isol}$ | a.c.50HZ;r.m.s.;1min             | 3000        | V      |
| $T_{vj}$   |                                  | -40 to +150 |        |
| $T_{stg}$  |                                  | -40 to +125 |        |
| $M_t$      | To terminals(M5)                 | $5\pm15\%$  | Nm     |
| $M_s$      | To heatsink(M5)                  | $5\pm15\%$  | Nm     |
| Weight     | Module (Approximately)           | 130         | g      |

## Thermal Characteristics

| Symbol        | Conditions             | Values | Units |
|---------------|------------------------|--------|-------|
| $R_{th(j-c)}$ | Per diode              | 1.1    | /W    |
| $R_{th(c-s)}$ | Module (Approximately) | 0.07   | /W    |

## Electrical Characteristics

## Performance Curves

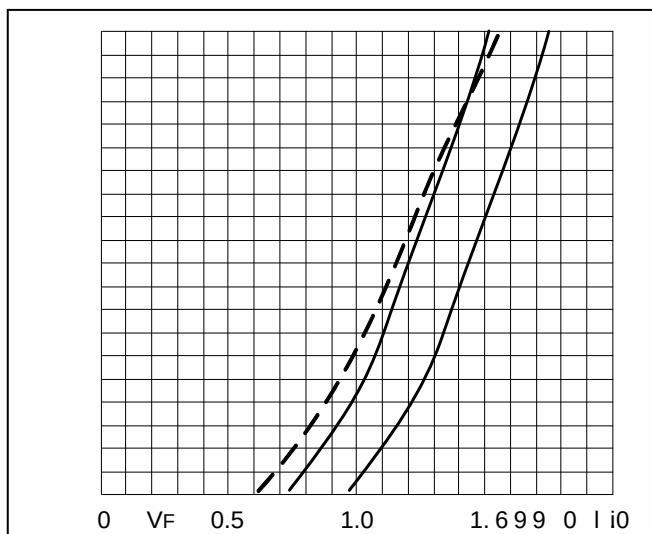


Fig1. Forward Characteristics



Fig2. Power dissipation

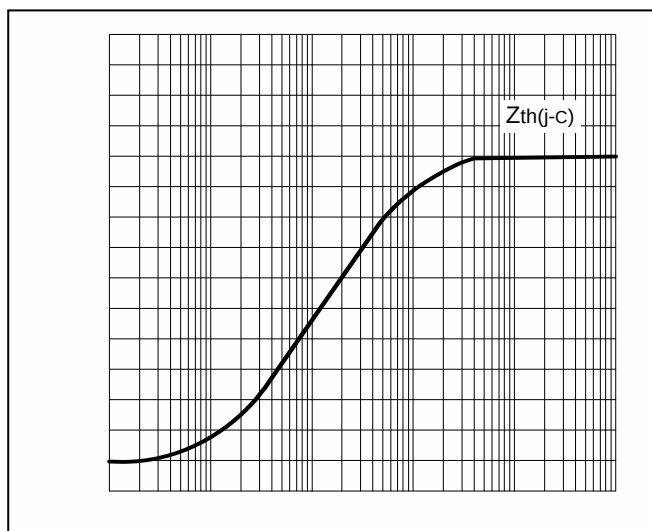


Fig3. Transient thermal impedance

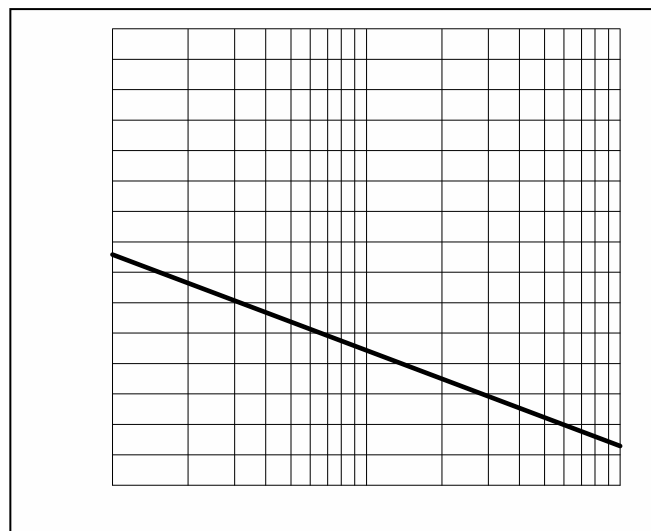


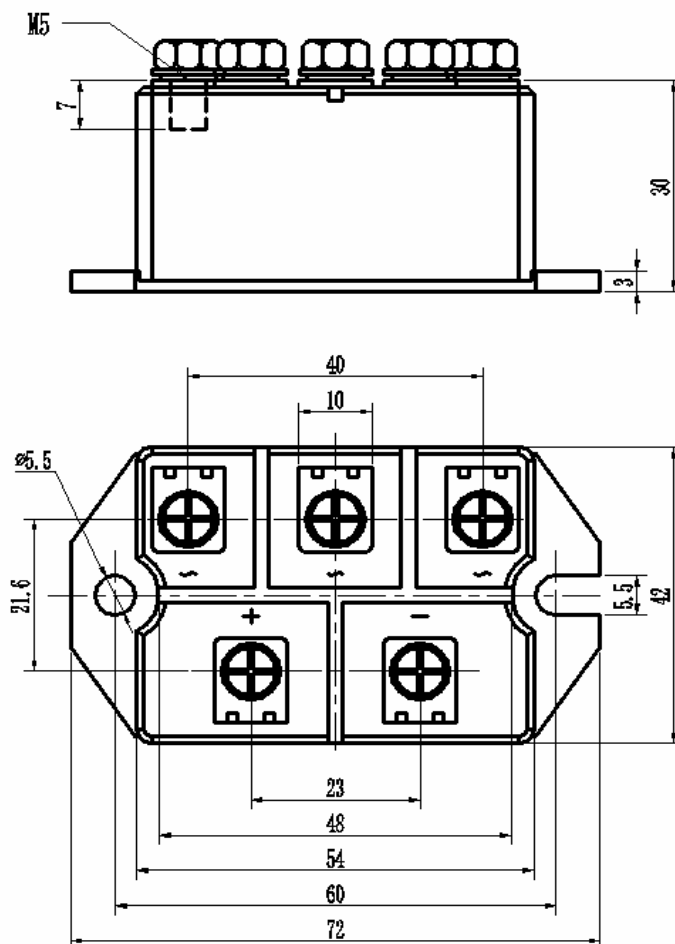
Fig4. Max Non-Repetitive Forward Surge Current



Fig5. Forward Current Derating Curve

## Package Outline Information

### CASE M2



Dimensions in mm