

**Features:**

- Isolated mounting base 2500V~
- Pressure contact technology with Increased power cycling capability
- Space and weight savings

Typical Applications

- Inverter
- Inductive heating
- Chopper

| V_{RSM} | V_{RRM} | Type & Outline |
|-----------|-----------|----------------|
| 900 V | 800 V | MDS50-08-218H5 |
| 1300 V | 1200 V | MDS50-12-218H5 |
| 1500 V | 1400 V | MDS50-14-218H5 |
| 1700 V | 1600 V | MDS50-16-218H5 |

| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | T_j (°C) | VALUE | | | UNIT |
|---------------|--|--|------------|-------|------|------|--------------------|
| | | | | Min | Type | Max | |
| I_o | DC output current | Three-phase full wave rectifying circuit, $T_c=100^\circ C$ | 150 | | | 50 | A |
| I_{RRM} | Repetitive peak current | at V_{RRM} | 150 | | | 8 | mA |
| I_{FSM} | Surge forward current | 10ms half sine wave $V_R=0$ | 100 | | | 0.40 | KA |
| I^2t | I^2T for fusing coordination | | | | | 0.8 | $A^2s \times 10^3$ |
| V_{FO} | Threshold voltage | | 150 | | | 0.7 | V |
| r_F | Forward slop resistance | | | | | 6.0 | $m\Omega$ |
| V_{FM} | Peak forward voltage | $I_{FM}=50A$ | 25 | | | 1.20 | V |
| $R_{th(j-c)}$ | Thermal resistance Junction to case | Single side cooled | | | | 0.30 | $^\circ C / W$ |
| $R_{th(c-h)}$ | Thermal resistance case to heatsink | Single side cooled | | | | 0.07 | $^\circ C / W$ |
| V_{iso} | Isolation voltage | 50Hz,R.M.S,t=1min, $I_{iso}:1mA(max)$ | 2500 | | | | V |
| F_m | Terminal connection torque(M5) | | | | | 4 | N·m |
| | Mounting torque(M6) | | | | | 6 | N·m |
| T_{vj} | junction temperature | | | -40 | | 150 | $^\circ C$ |
| T_{stg} | Stored temperature | | | -40 | | 125 | $^\circ C$ |
| W_t | Weight | | | | | 210 | g |
| Outline | | | | 218H5 | | | |

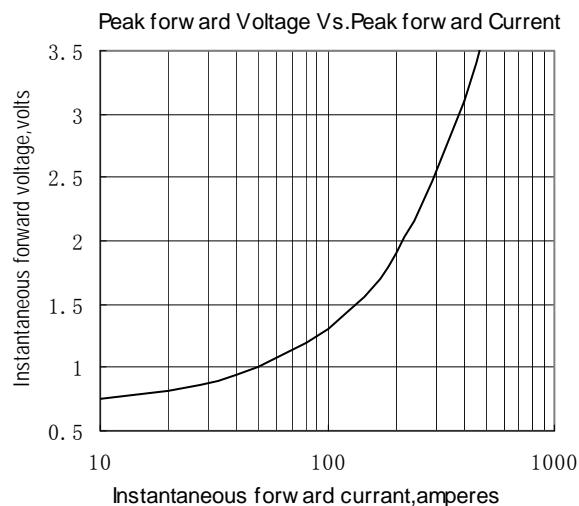


Fig.1

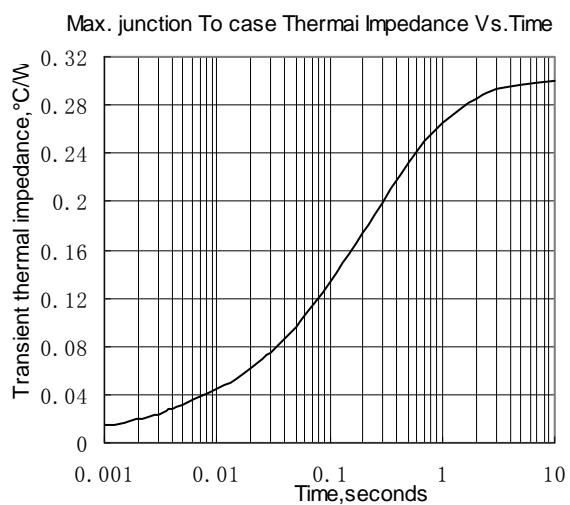


Fig.2

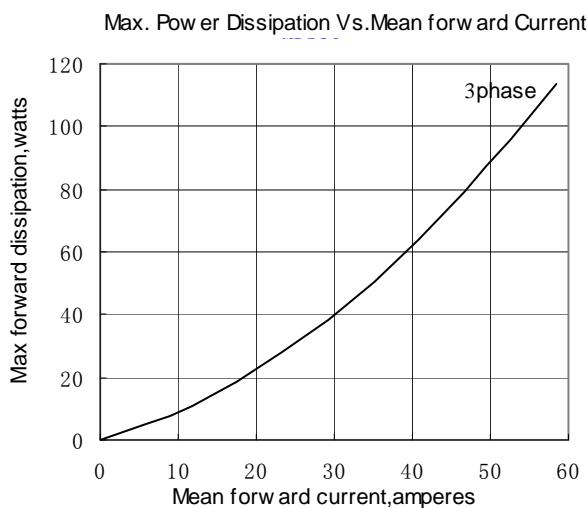


Fig.3

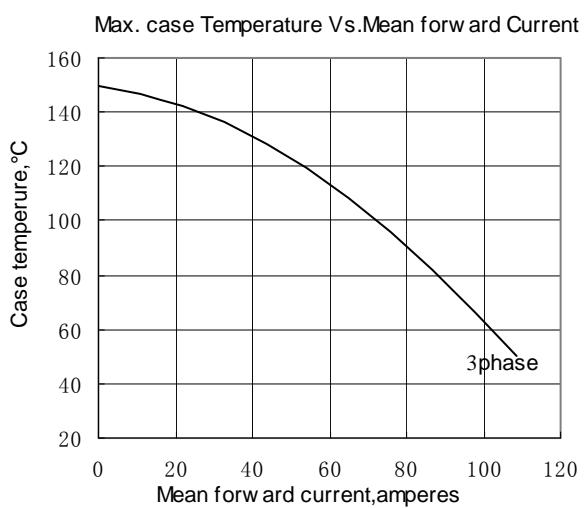


Fig.4

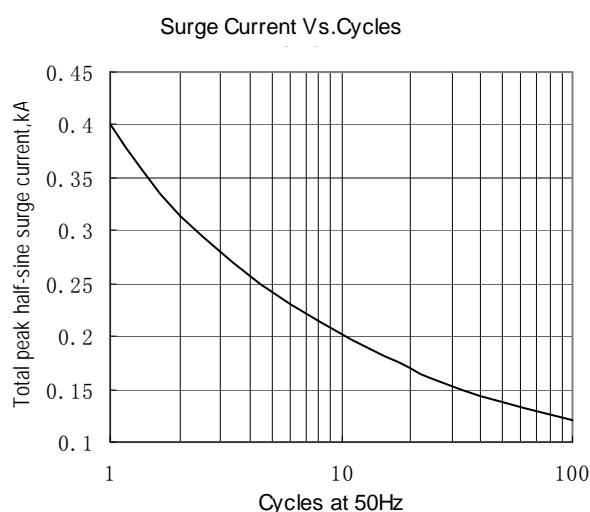


Fig.5

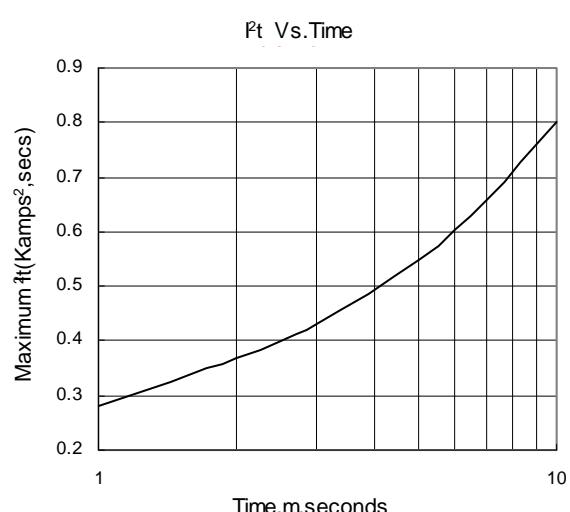
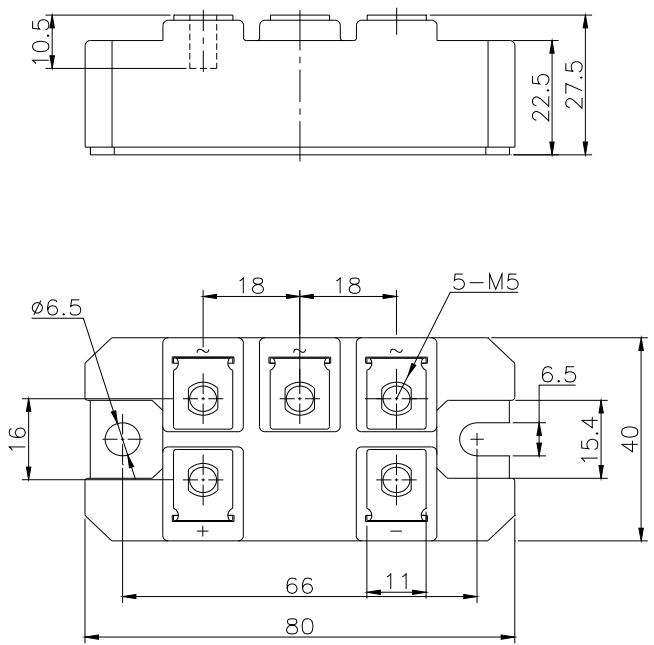


Fig.6

Outline:**218H5****MDS**