

**Features:**

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

Typical Applications:

- n Inverter
- n Inductive heating
- n Chopper

| V _{RRM} | Type & Outline |
|------------------|----------------|
| 600V | MZx75-06-216F3 |
| 800V | MZx75-08-216F3 |
| 1000V | MZx75-10-216F3 |
| 1200V | MZx75-12-216F3 |
| 1400V | MZx75-14-216F3 |
| 1600V | MZx75-16-216F3 |
| 1800V | MZx75-18-216F3 |
| 1800V | MZ75-18-216F3G |

MZx stands for any type of **MZC, MZA, MZK**

| 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 =85°C | 140 | | | 75 | A |
| I _{F(RMS)} | RMS forward current | | | | | 118 | A |
| I _{RRM} | Repetitive peak current | at V _{RRM} | 140 | | | 20 | mA |
| I _{FSM} | Surge forward current | 10ms half sine wave V _R =0.6V _{RRM} | 140 | | | 2.0 | kA |
| I ² t | I ² t for fusing coordination | | | | | 20 | 10 ³ A ² s |
| V _{FO} | Threshold voltage | | 140 | | | 1.10 | V |
| r _F | Forward slope resistance | | | | | 3.00 | m |
| V _{FM} | Peak forward voltage | I _{FM} =225A | 25 | | | 2.00 | V |
| t _{rr} | Reverse recovery time | I _{FM} =200A, t _p =4000μs, -di/dt=20A/μs, V _R =50V | 140 | | 3.0 | | μs |
| | | | 25 | | 2.0 | | μs |
| R _{th(j-c)} | Thermal resistance Junction to case | Single side cooled per chip | | | | 0.310 | °C /W |
| R _{th(c-h)} | Thermal resistance case to heatsink | Single side cooled per chip | | | | 0.080 | °C /W |
| F _m | Terminal connection torque(M6) | | | 4.5 | | 6.0 | N·m |
| | Mounting torque(M6) | | | 4.5 | | 6.0 | N·m |
| V _{iso} | Isolation voltage | 50Hz, R.M.S, t=1min, I _{iso} :1mA(MAX) | | 3000 | | | V |
| T _{vj} | Junction temperature | | | -40 | | 140 | °C |
| T _{stg} | Stored temperature | | | -40 | | 125 | °C |
| W _t | Weight | | | | 320 | | g |
| Outline | 216F3 | | | | | | |

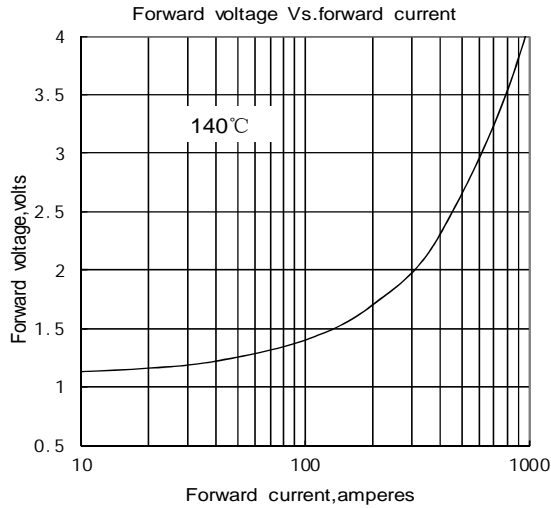


Fig.1

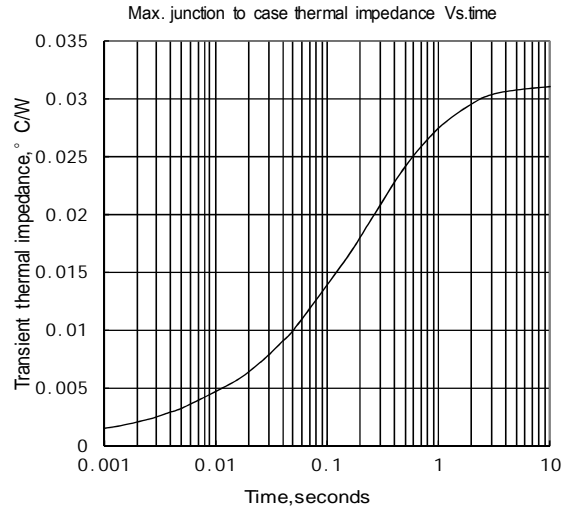


Fig.2

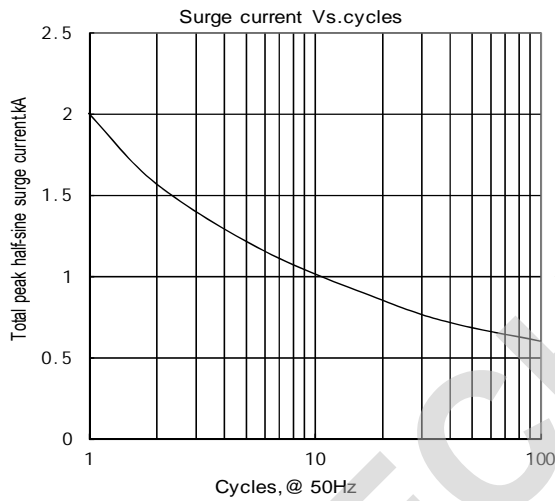


Fig.3

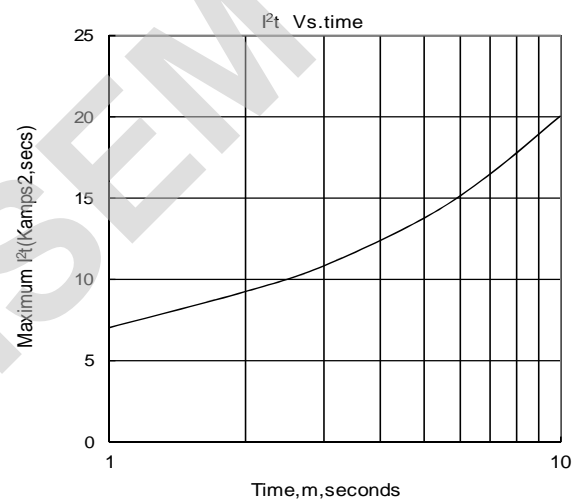
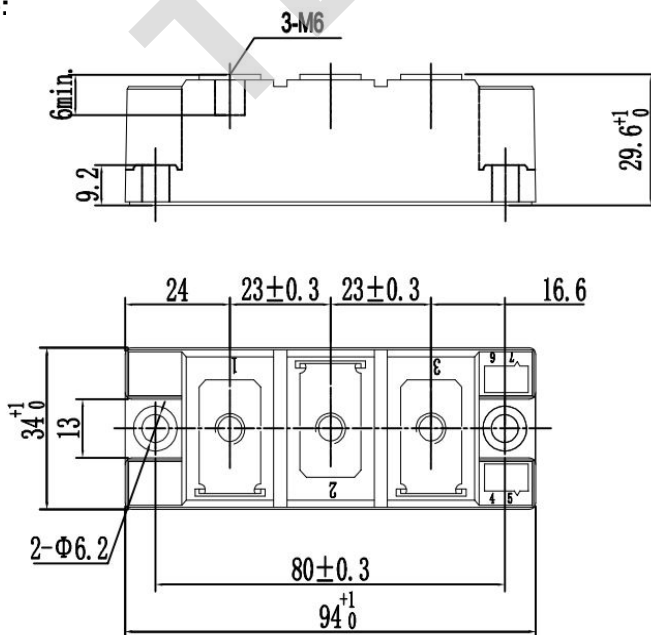
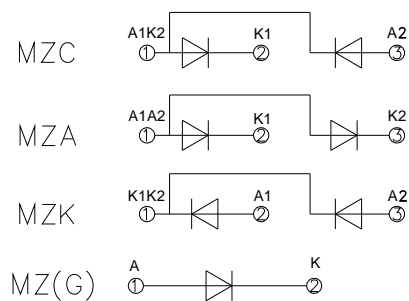


Fig.4

Outline:



Unmarked dimensional tolerance: ±0.5mm



TECHSEM reserves the right to change specifications without notice.