



Diode Modules MDx1200



AS ENERGI

I_{F(AV)} 1200A
V_{RRM} 600~1800V
I_{FSM} 34 A \times 10³
I²t 5780A² S \cdot 10³

Features:

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

Typical Applications

- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

| 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 =100°C | 150 | | | 1200 | A |
| I _{F(RMS)} | RMS forward current | | 150 | | | 1884 | A |
| V _{RRM} | Repetitive peak reverse voltage | V _{RRM} tp=10ms V _{RsM} = V _{RRM} +100V | 150 | 600 | | 1800 | V |
| I _{RRM} | Repetitive peak current | at V _{RRM} | 150 | | | 50 | mA |
| I _{FSM} | Surge forward current | 10ms half sine wave | 150 | | | 34 | KA |
| I ² t | I ² T for fusing coordination | V _R =0.6V _{RRM} | | | | 5780 | A ² s*10 ³ |
| V _{FO} | Threshold voltage | | 150 | | | 0.71 | V |
| r _F | Forward slop resistance | | | | | 0.11 | mΩ |
| V _{FM} | Peak forward voltage | I _{FM} =3000A | 25 | | | 1.86 | V |
| R _{th(j-c)} | Thermal resistance Junction to case | At 180° sine Single side cooled | | | | 0.040 | °C /W |
| R _{th(c-h)} | Thermal resistance case to heat sink | At 180° sine Single side cooled | | | | 0.020 | °C /W |
| V _{iso} | Isolation voltage | 50Hz,R.M.S,t=1min, I _{iso} :1mA(max) | 2500 | | | | V |
| F _m | Terminal connection torque(M12) | | | | 14 | | N·m |
| | Mounting torque(M8) | | | | 12 | | N·m |
| T _{stg} | Stored temperature | | | -40 | | 125 | °C |
| W _t | Weight | | | | 3800 | | g |
| Outline | | | | | | | |

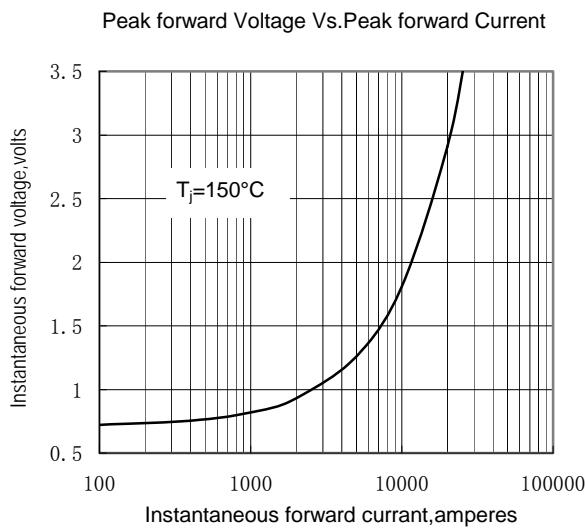


Fig.1

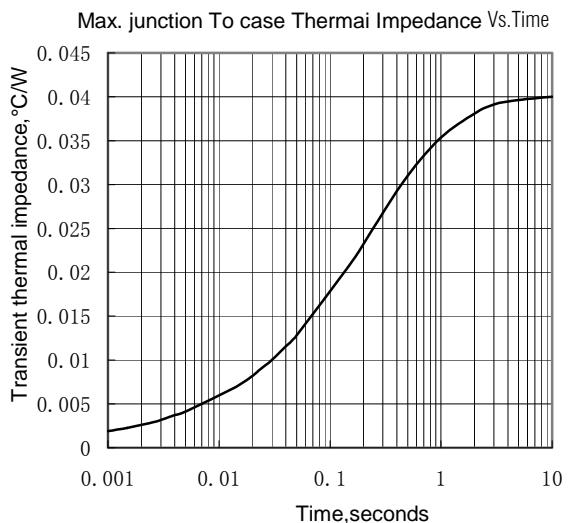


Fig.2

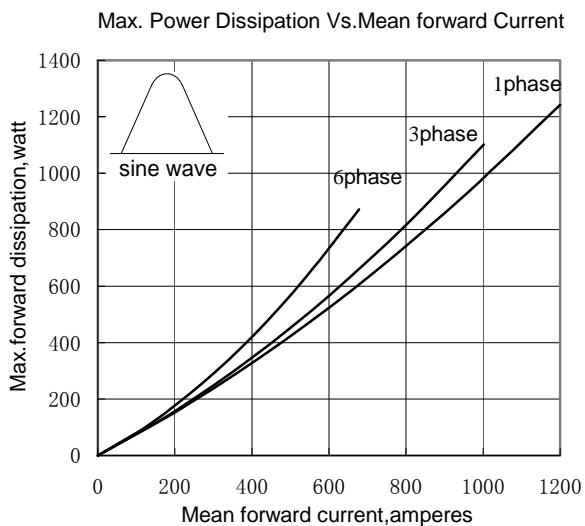


Fig.3

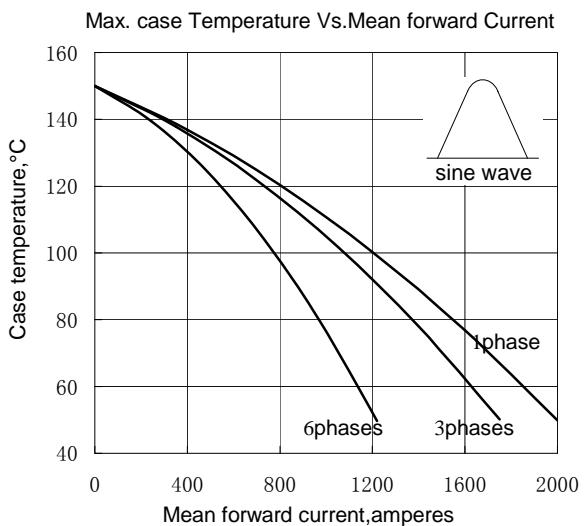


Fig.4

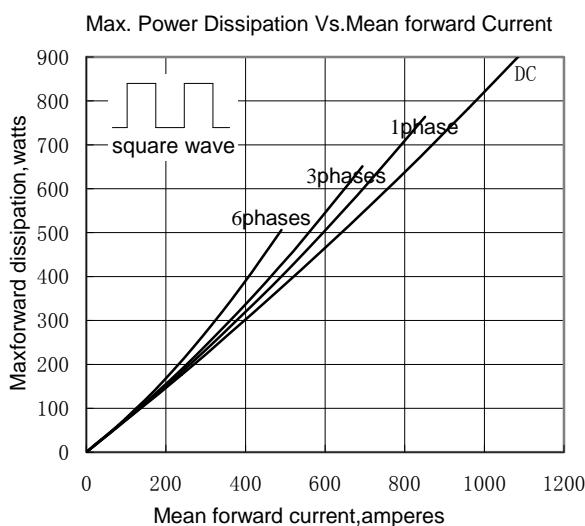


Fig.5

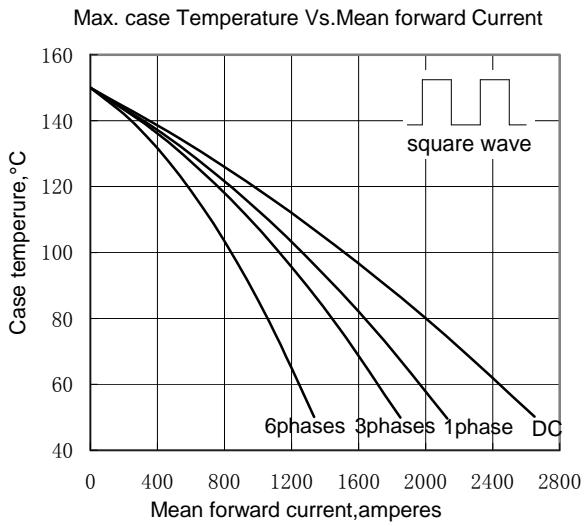


Fig.6

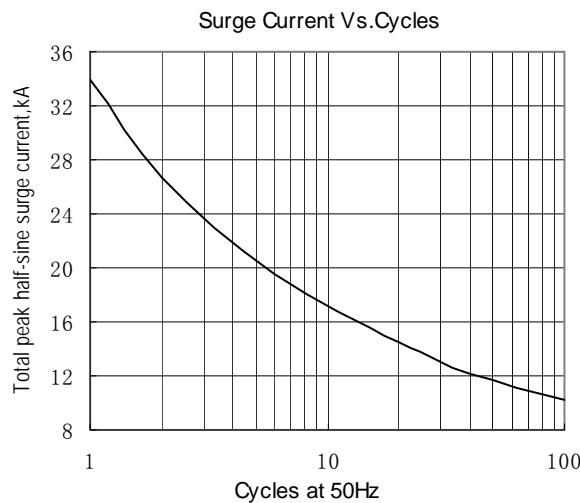


Fig.7

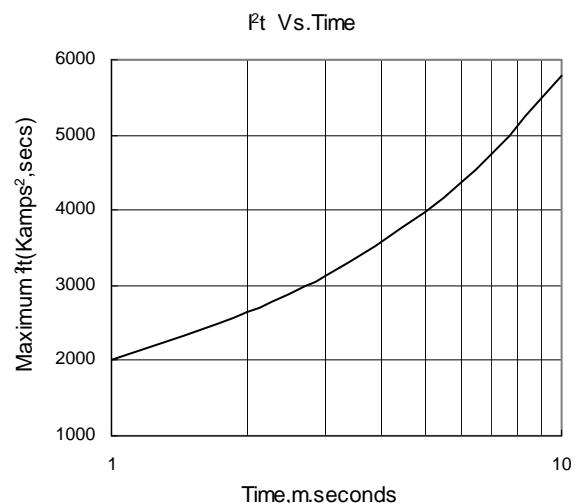


Fig.8

Outline:

