



Diode Modules MDx300



AS ENERGI

I_{F(AV)} 300A
V_{RRM} 1900~2500V
I_{FSM} 10 A×10³
I²t 500A² S×10³

Features:

- Isolated mounting base 3000V~
- 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 | | | 300 | A |
| I _{F(RMS)} | RMS forward current | | 150 | | | 471 | A |
| V _{RRM} | Repetitive peak reverse voltage | V _{RRM} tp=10ms V _{RsM} = V _{RRM} +100V | 150 | 1900 | | 2500 | V |
| I _{RRM} | Repetitive peak current | at V _{RRM} | 150 | | | 20 | mA |
| I _{FSM} | Surge forward current | 10ms half sine wave V _R =0.6V _{RRM} | 150 | | | 10 | KA |
| I ² t | I ² T for fusing coordination | | | | | 500 | A ² s×10 ³ |
| V _{FO} | Threshold voltage | | 150 | | | 0.80 | V |
| r _F | Forward slop resistance | | | | | 0.50 | mΩ |
| V _{FM} | Peak forward voltage | I _{FM} =900A | 25 | | | 1.45 | V |
| R _{th(j-c)} | Thermal resistance Junction to case | At 180° sine Single side cooled | | | | 0.120 | °C /W |
| R _{th(c-h)} | Thermal resistance case to heatsink | At 180° sine Single side cooled | | | | 0.04 | °C /W |
| V _{iso} | Isolation voltage | 50Hz,R.M.S,t=1min,I _{iso} :1mA(max) | | 3000 | | | V |
| F _m | Terminal connection torque(M8) | | | | 12 | | N·m |
| | Mounting torque(M6) | | | | 6 | | N·m |
| T _{stg} | Stored temperature | | | -40 | | 125 | °C |
| W _t | Weight | | | | 860 | | g |
| Outline | | | | | | | |

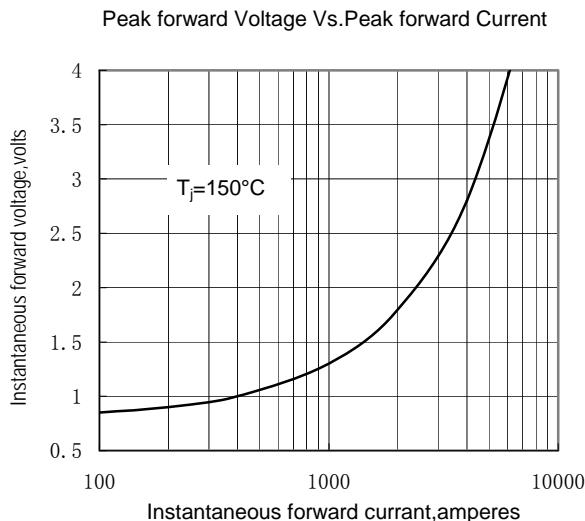


Fig.1

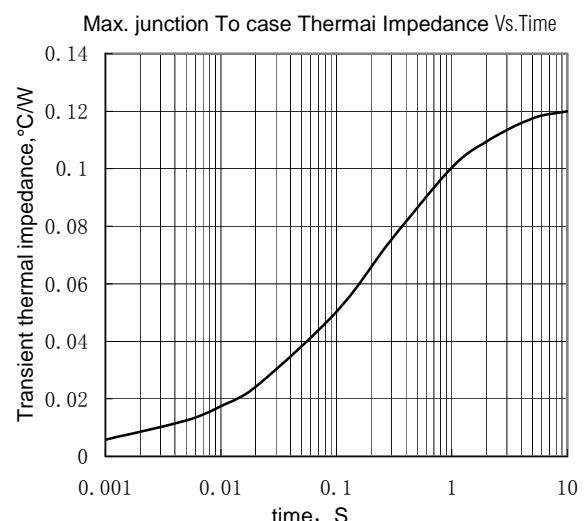


Fig.2

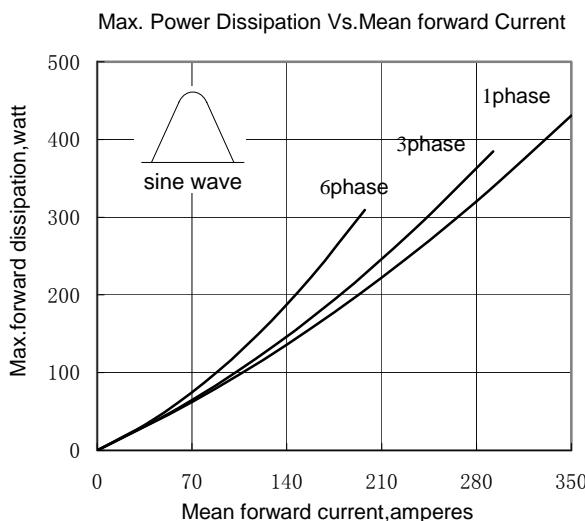


Fig.3

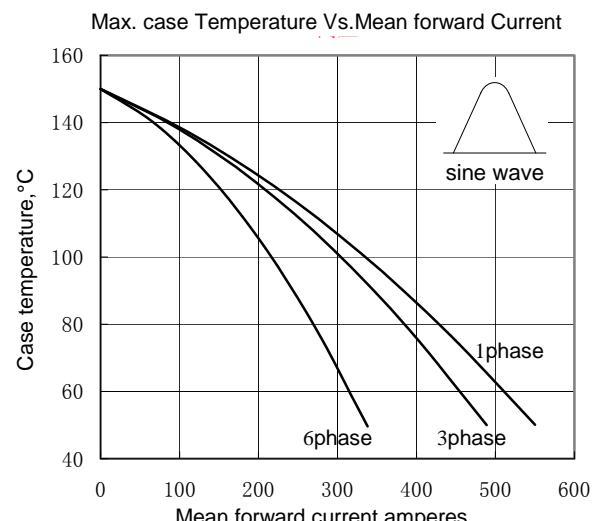


Fig.4

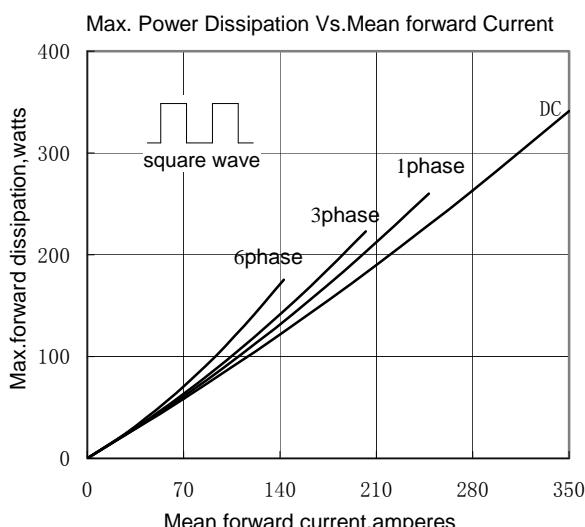


Fig.5

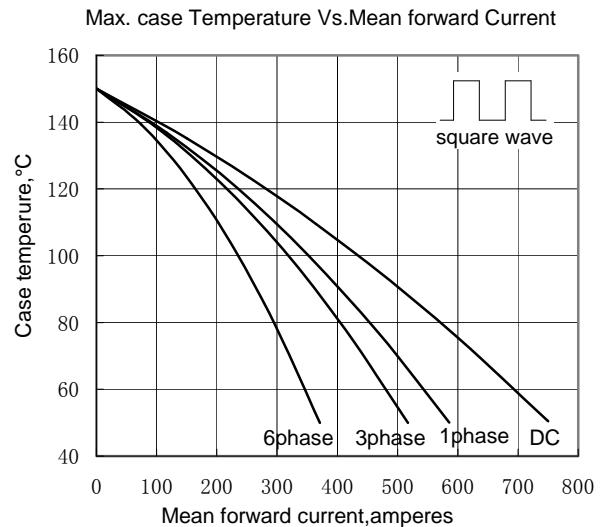


Fig.6

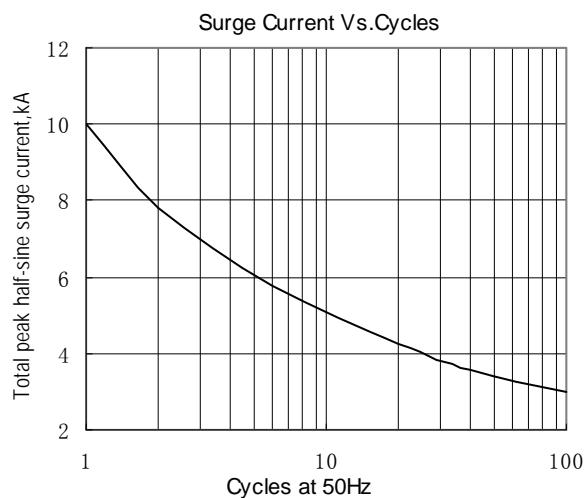


Fig.7

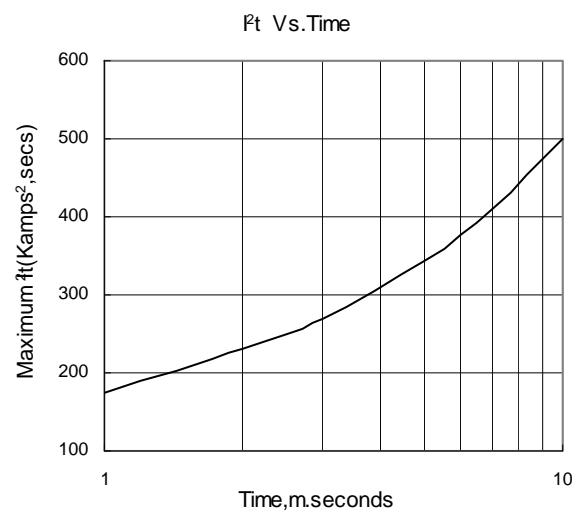


Fig.8

Outline:

