

Features

- Low forward voltage drop
- Soft recovery
- Hermetic metal cases with ceramic insulators

I_{F(AV)} 720 A
V_{RRM} 2100 ~ 3000V
trr 4.0 μs

Typical Applications

- Inverters and choppers
- Motor control
- Snubber and free-wheeling diodes

| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | | T _j (°C) | VALUE | | | UNIT |
|----------------------|--|---|----------------------|---------------------|-------|------|-------|----------------------------------|
| | | | | | Min | Type | Max | |
| I _{F(AV)} | Mean forward current | 180° half sine wave 50Hz Double side cooled, | T _C =85°C | 150 | | | 720 | A |
| V _{RRM} | Repetitive peak reverse voltage | tp=10ms | | 150 | 2100 | | 3000 | V |
| I _{RRM} | Repetitive peak current | at V _{RRM} | | 150 | | | 50 | mA |
| I _{FSM} | Surge forward current | 10ms half sine wave | | 150 | | | 10 | kA |
| I ² t | I ² t for fusing coordination | V _R =0.6V _{RRM} | | | | | 500 | A ² s*10 ³ |
| V _{FO} | Threshold voltage | | | 150 | | | 1.78 | V |
| r _F | Forward slope resistance | | | | | | 0.45 | mΩ |
| V _{FM} | Peak forward voltage | I _{TM} =1000A, F=15kN | | 25 | | | 2.90 | V |
| I _m | Reverse recovery current | I _{TM} =1000A, tp=4000μs, di/dt=-60A/μs, V _R =100V | | 150 | | 80 | | A |
| t _{rr} | Reverse recovery time | | | | | 4 | | μs |
| Q _{rr} | Recovery charge | | | | | 120 | 150 | μC |
| R _{th(j-c)} | Thermal resistance Junction to case | D.C.· double side cooled Clamping force15kN | | | | | 0.035 | °C/W |
| R _{th(c-h)} | Thermal resistance case to heat sink | | | | | | 0.008 | |
| F _m | Mounting force | | | | 10 | | 20 | kN |
| T _{vj} | Junction temperature | | | | -40 | | 150 | °C |
| T _{stg} | Stored temperature | | | | -40 | | 160 | °C |
| W _t | Weight | | | | | 250 | | g |
| Outline | P39 | | | | | | | |

Outline:

