



Features

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

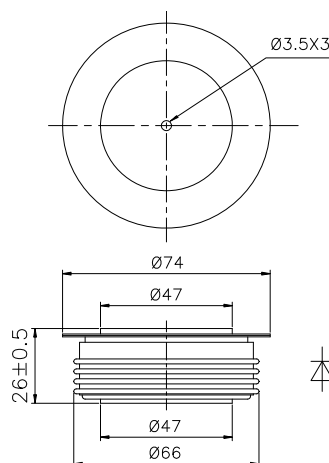
Typical Applications

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

| | | |
|-------------------------------|--------------|--------------|
| Part No. Y50ZKC-ZT50cT | | |
| I_{F(AV)} | 1400A | |
| V_{RRM} | 1200V | 1400V |
| | 1600V | 1800V |
| | 2000V | |

| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | | T _J (°C) | VALUE | | | UNIT |
|----------------------|--|---|----------------------|---------------------|-------|-------|-------|------|
| | | | | | Min | Type | Max | |
| I _{F(AV)} | Mean forward current | 180° half sine wave 50Hz | T _C =85°C | 150 | | | 1400 | A |
| V _{RRM} | Repetitive peak reverse voltage | t _p =10ms | | 150 | 1100 | | 2000 | V |
| I _{RRM} | Repetitive peak current | at V _{RRM} | | 150 | | | 100 | mA |
| I _{FSM} | Surge forward current | 10ms half sine wave | | 150 | | | 19 | kA |
| I ² t | I ² t for fusing coordination | V _R =0.6V _{RRM} | | | | | | 1805 |
| V _{FO} | Threshold voltage | | | 150 | | | 1.42 | V |
| r _F | Forward slope resistance | | | | | | | 0.36 |
| V _{FM} | Peak forward voltage | I _{TM} =3000A, F=24kN | | 25 | | | 2.80 | V |
| I _{rm} | Reverse recovery current | I _{TM} =1000A, t _p =4000μs, di/dt=-60A/μs, V _R =100V | | 150 | | 76 | | A |
| t _{rr} | Reverse recovery time | | | | | 6 | | μs |
| Q _{rr} | Recovery charge | | | | | 228 | 250 | μC |
| R _{th(j-c)} | Thermal resistance Junction to case | At 180° sine double side cooled Clamping force 24kN | | | | | 0.020 | °C/W |
| R _{th(c-h)} | Thermal resistance case to heat sink | | | | | 0.005 | | |
| F _m | Mounting force | | | | 19 | | 26 | kN |
| T _{vj} | Junction temperature | | | | -40 | | 150 | °C |
| T _{stg} | Stored temperature | | | | -40 | | 160 | °C |
| W _t | Weight | | | | | 440 | | g |
| Outline | ZT50cT | | | | | | | |

Outline:



TECHSEM reserves the right to change specifications without notice.