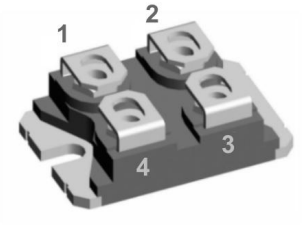
# HFM2x61-06

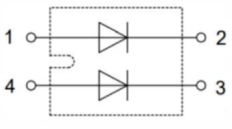
Features

- International standard package
- Isolation voltage 2500 VAC
- 2 independent FRED in 1 package
- Planar passivated chips
- Very short recovery time
- Extremely low switching losses
- Low $I_{RM}$-values
- Soft recovery behaviour




Applications

- Antiparallel diode for high frequency switching devices
- Free wheeling diode in converters and motor control circuits
- Inductive heating and melting
- Ultrasonic cleaners and welders
- Uninterruptible power supplies (UPS)
- Anti saturation diode
- Snubber diode
- Rectifiers in switch mode power supplies (SMPS)




ABSOLUTE MAXIMUM RARINGS(*Tc=25℃ unless otherwise specified*)

| Symbol | Parameter/Test Cobditions | | Values | Unit |
|---|---|---|---|---|
| $V_R$ | Maximum d.c. Reverse Voltage | | 600 | V |
| $V_{RRM}$ | Maximum Repetitive Reverse Voltage | | 600 | V |
| $I_{F(AV)}$ | Average Forward Current | Tc=90℃,Per Diode | 60 | A |
| | | Tc=90℃,Per Mordle,Tvj=150℃ | 2x60 | A |
| $I_{F(RMS)}$ | RMS Forward Current | Tc=90℃,Per Diode | 85 | A |
| $I_{FSM}$ | Non Repetitive Surge Forward Current | TJ=45℃,10ms,Sine,peak value | 550 | A |
| $I^2t$ | For Fusing | $T_J$=45℃,10ms,Sine,peak value | 1250 | $A^2S$ |
| | | $T_J$=45℃,8.3ms,Sine,peak value | 1510 | |
| $P_D$ | Power Dissipation | | 170 | W |
| $T_J$ | Junction Timperature | | -40 to+150 | ℃ |
| $T_{STG}$ | Sterage Temperature Range | | -40 to+150 | ℃ |
| Viso | Isolation Breakdown Voltage | AC,50Hz(RMS),t=1min | 2500 | V |
| $R_{thjc}$ | Junction to Case Thermal Resistance(Per Diode) | | 0.8 | ℃/w |
| Torque | Module to Sink | M4 | 1.0-1.5 | Nm |
| | Module Electrodes | M4 | 1.0-1.5 | Nm |
| Weight | | | 30 | g |

ELECTRICAL CHARACTERISTICS (*Tc=25℃ unless otherwise specified*)

| Symbol | Parameter/Test Cobditions | | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|
| $I_{RRM}$ | Maximum Reverse Leakage Current | $V_R$=600V | | | 0.05 | mA |
| | | $V_R$=600V, Tj=150℃ | | | 3 | |
| $V_F$ | Forward Voltage | $I_F$=60A | | 1.55 | 1.8 | V |
| | | $I_F$=60A, Tj=125℃ | | 1.4 | | |
| $t_{rr}$ | Reverse Recovery Time ($I_F$=1A, $dI_F/dt$=-200A/us, $V_R$=30V) | | | 32 | | ns |
| $I_{RM}$ | Maximrm Reverse Recovery Current | $V_R$=600V, $I_F$=30A, -diF/dt=200A/μs, $T_{VJ}$=125° C | | 10 | | A |

## Outlines