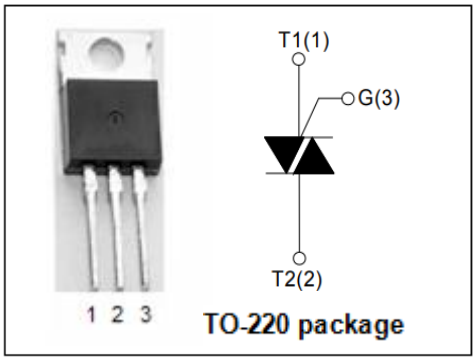
# isc Triacs HQ6025RH5

## FEATURES

- With TO-220AB non insulated package
- Suitable for general purpose AC switching. Which can be used as an ON/OFF function in applications such as static relays, heating regulation,induction motor starting circuits. Or for phase control operation in light dimmers, motor speed controllers etc.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation




## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

| SYMBOL | PARAMETER | | MIN | UNIT |
|---|---|---|---|---|
| $V_{DRM}$ | Repetitive peak off-state voltage | | 600 | V |
| $V_{RRM}$ | Repetitive peak off-state voltage | | 600 | V |
| $I_{T(RMS)}$ | RMS on-state current (full sine wave) Tc=102℃ | | 25 | A |
| $I_{TSM}$ | Non-repetitive peak on-state current $t_p$=20ms，Tj=25℃ | f=50Hz | 250 | A |
| | | f=60Hz | 300 | |
| $T_j$ | Operating junction temperature | | -40~150 | ℃ |
| $T_{stg}$ | Storage temperature | | -40~150 | ℃ |
| $R_{th(j-c)}$ | Thermal resistance, junction to case | | 0.86 | ℃/W |
| $R_{th(j-a)}$ | Thermal resistance, junction to ambient | | 45 | ℃/W |

## ELECTRICAL CHARACTERISTICS ($T_C$=25℃ unless otherwise specified)

| SYMBOL | PARAMETER | | CONDITIONS | MAX | UNIT |
|---|---|---|---|---|---|
| $I_{RRM}$ | Repetitive peak reverse current | | $V_R=V_{RRM}$,<br>$V_R=V_{RRM}$, Tj=125℃ | 5<br>6000 | uA |
| $I_{DRM}$ | Repetitive peak off-state current | | $V_D=V_{DRM}$,<br>$V_D=V_{DRM}$, Tj=125℃ | 5<br>6000 | uA |
| $I_{GT}$ | Gate trigger current | I | $V_D$=12V; $R_L$= 60Ω | 50 | mA |
| | | II | | 50 | |
| | | III | | 50 | |
| $I_H$ | Holding current | | $I_{GT}$= 400mA, Gate Open | 80 | mA |
| $V_{GT}$ | Gate trigger voltage all quadrant | | $V_D$=12V; $R_L$= 60Ω | 1.3 | V |
| $V_{TM}$ | On-state voltage | | $I_T$= 35.4A; $t_p$= 380μ s | 1.4 | V |

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