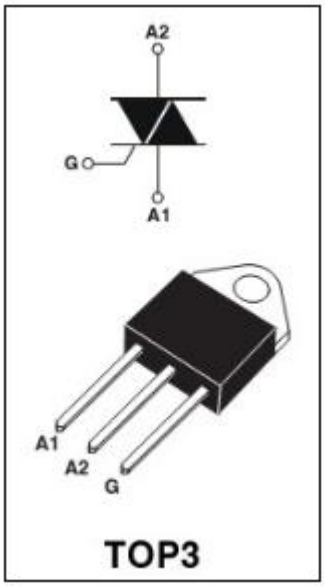
# isc Triacs TPDV840

## FEATURES

- With TOP3 insulated package
- Be suitable for general purpose where high surge current capability is required.
  Application such as phase control and tatic switching on inductive or resistive load.

## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

| SYMBOL | PARAMETER | | Value | UNIT |
|---|---|---|---|---|
| $V_{DRM}$ | Repetitive peak off-state voltage | | 800 | V |
| $V_{RRM}$ | Repetitive peak reverse voltage | | 800 | V |
| $I_{T(RMS)}$ | RMS on-state current (full sine wave)Tc=75℃ | | 40 | A |
| $I_{TSM}$ | Non-repetitive peak on-state current | $t_p$=2.5ms | 590 | A |
| | | $t_p$=8.3ms | 370 | |
| | | $t_p$=10ms | 350 | |
| $T_j$ | Operating junction temperature | | -40~125 | ℃ |
| $T_{stg}$ | Storage temperature | | -40~150 | ℃ |
| $P_{G(AV)}$ | Average gate power dissipation($T_j$=125℃) | | 1 | W |
| $R_{th(j-c)}$ | Thermal resistance, junction to case | | 1.2 | ℃/W |
| $R_{th(j-a)}$ | Thermal resistance, junction to ambient | | 50 | ℃/W |




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

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|---|---|---|---|---|
| $I_{RRM}$ | Repetitive peak reverse current | $V_R$=$V_{RRM}$, Tj=25℃<br>Tj=125℃ | 0.028 | mA |
| $I_{DRM}$ | Repetitive peak off-state current | $V_R$=$V_{RRM}$, Tj=25℃<br>Tj=125℃ | 0.028 | mA |
| $I_{GT}$ | Gate trigger current Quadrant (I-II-III) | $V_D$=12V; $R_L$= 33Ω | 200 | mA |
| $V_{GT}$ | Gate trigger voltage all quadrant Quadrant(I-II-III) | $V_D$=12V; $R_L$= 33Ω | 1.5 | V |
| $V_{TM}$ | On-state voltage | $I_{TM}$= 60A; $t_p$= 380 μs | 1.8 | V |