

MAIN FEATURES

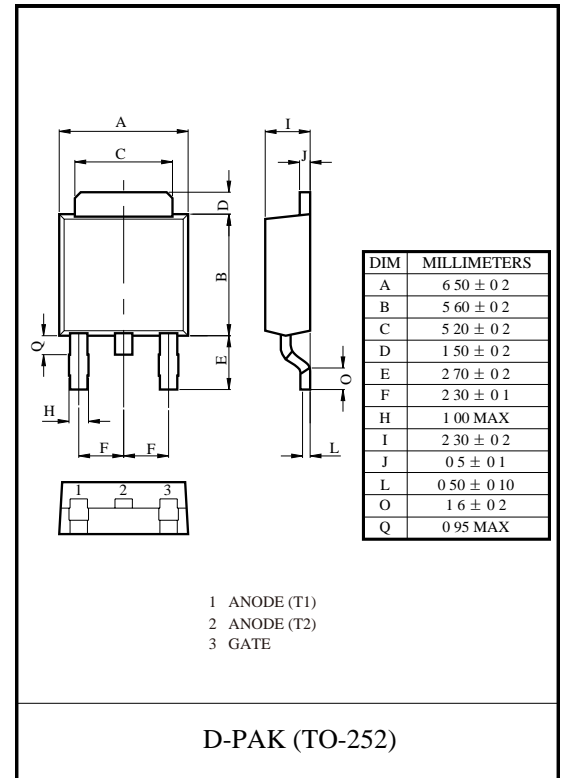
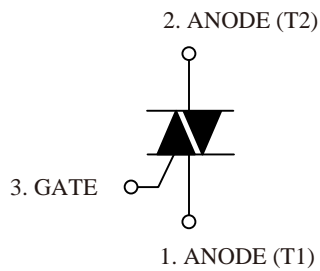
| Symbol | value | unit |
|---------------------|-------|------|
| $I_{T(RMS)}$ | 4 | A |
| V_{DRM} / V_{RRM} | 600 | V |
| I_{TSM} | 25 | A |

FEATURES

Glass passivated triacs in a plastic, intended for use in applications requiring high bidirectional transient and blocking voltage capability and high thermal cycling performance.

Typical applications include motor control, industrial and domestic lighting, heating and static switching.

SYMBOL



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

| PARAMETER | SYMBOL | RATINGS | UNIT | |
|---|--|--------------|----------------------|------------------------|
| Repetitive Peak Off-State Voltages | V_{DRM} | 600 (Note 2) | V | |
| RMS On-State Current (full sine wave, $T_{MB} \leq 107^\circ\text{C}$) | $I_{T(RMS)}$ | 4 | A | |
| Non-Repetitive Peak On-State Current (Full sine wave; $T_J=25^\circ\text{C}$ prior to surge) | $t=20\text{ms}$ | 25 | A | |
| | $t=16.7\text{ms}$ | 27 | A | |
| I^2t for fusing ($t=10\text{ms}$) | I^2t | 3.1 | A^2s | |
| Repetitive Rate of Rise of On-State Current After Triggering | $I_{TM}=6\text{A},$ $I_G=0.2\text{A},$ $di_G/dt=0.2\text{A}/\mu\text{s}$ | T2+ G+ | 50 | $\text{A}/\mu\text{s}$ |
| | | T2+ G- | 50 | $\text{A}/\mu\text{s}$ |
| | | T2- G- | 50 | $\text{A}/\mu\text{s}$ |
| | | T2- G+ | 10 | $\text{A}/\mu\text{s}$ |
| Peak Gate Voltage | V_{GM} | 5 | V | |
| Peak Gate Current | I_{GM} | 2 | A | |
| Peak Gate Power | P_{GM} | 5 | W | |
| Average Gate Power (over any 20 ms period) | $P_{G(AV)}$ | 0.5 | W | |
| Junction Temperature | T_J | 150 | $^\circ\text{C}$ | |
| Storage Temperature | T_{STG} | -40 ~ +150 | $^\circ\text{C}$ | |

Note: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

2. Although not recommended, off-state voltages up to 800V may be applied without damage, but the triac may switch to the on-state. The rate of rise of current should not exceed $3\text{A}/\mu\text{s}$.



ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

| Parameter | | Symbol | Test conditions | | Min | Max | Unit |
|---|-----|--------------------|--------------------------------------|-------------------------------------|------|------|---------------|
| Rated repetitive peak off-state/reverse voltage | | V_{DRM}, V_{RRM} | $I_D=10\mu\text{A}$ | | 600 | | V |
| Rated repetitive peak off-state current | | I_{DRM}, I_{RRM} | $V_D=620\text{V}$ | | | 10 | μA |
| On-state voltage | | V_{TM} | $I_T=5\text{A}$ | | | 1.7 | V |
| Gate trigger current | I | I_{GT} | $T_2(+), G(+)$ | $V_D=12\text{V}$ $R_L=100\Omega$ | | 10 | mA |
| | II | | $T_2(+), G(-)$ | | 10 | mA | |
| | III | | $T_2(-), G(-)$ | | 10 | mA | |
| | IV | | $T_2(-), G(+)$ | | 20 | mA | |
| Gate trigger voltage | I | V_{GT} | $T_2(+), G(+)$ | $V_D=12\text{V}$ $R_L=100\Omega$ | | 1.45 | V |
| | II | | $T_2(+), G(-)$ | | 1.45 | V | |
| | III | | $T_2(-), G(-)$ | | 1.45 | V | |
| | IV | | $T_2(-), G(+)$ | | 1.7 | V | |
| Holding current | | I_H | $I_T=100\text{mA}$ $I_G=20\text{mA}$ | | | 20 | mA |

