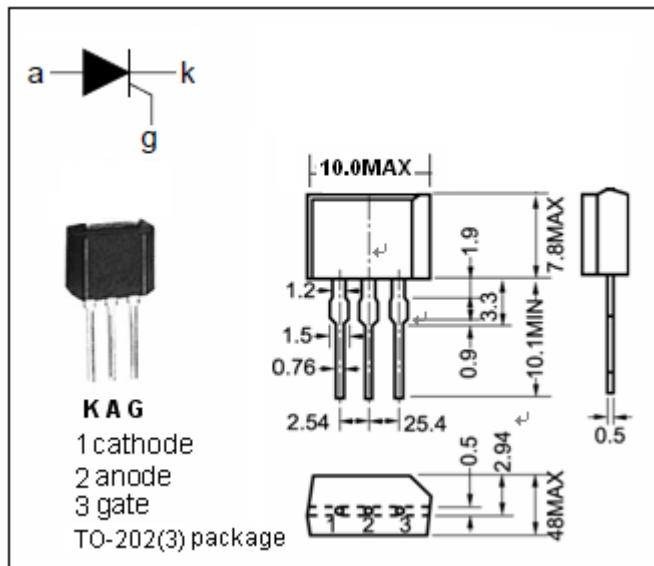


isc Thyristors

3P4M

APPLICATIONS

- Motor speed control for household appliance.
- Temperature control for heater and constant temperature box.
- Constant voltage power source and battery charger.
- Automotive application such as regulator.
- Various solid state relay etc.

**ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)**

| SYMBOL | PARAMETER | MIN | UNIT |
|--------------|---------------------------------------|--------------|------------------|
| V_{DRM} | Repetitive peak off-state voltage | 600 | V |
| V_{RRM} | Repetitive peak reverse voltage | 600 | V |
| $I_{T(AV)}$ | On-state current | 3 | A |
| $I_{T(RMS)}$ | RMS on-state current | 4 | A |
| I_{TSM} | Surge non-repetitive on-state current | 25 | A |
| T_j | Junction temperature | 125 | $^\circ\text{C}$ |
| T_{stg} | Storage temperature | -40 to + 125 | $^\circ\text{C}$ |

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

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|---------------|-----------------------------------|--|-----|-----|--------------------|
| I_{RRM} | Repetitive peak reverse current | $V_{RRM}=600\text{V}$, $R_{GK}=1\text{k}\Omega$ | | 20 | μA |
| I_{DRM} | Repetitive peak off-state current | $V_{DRM}=600\text{V}$, $R_{GK}=1\text{k}\Omega$ | | 20 | μA |
| V_{TM} | On-state voltage | $I_{TM}=5\text{A}$ | | 1.7 | V |
| I_{GT} | Gate-trigger current | $V_{DM}=6\text{V}$; $R_L=100\ \Omega$ | 10 | 100 | μA |
| V_{GT} | Gate-trigger voltage | $V_{DM}=6\text{V}$; $R_L=100\ \Omega$ | 0.5 | 0.8 | V |
| I_H | Holding current | $I_T=0.1\text{A}$; $I_{GT}=0.2\text{mA}$ | | 5 | mA |
| $R_{th(j-c)}$ | Thermal resistance | Junction to case | | 2.5 | $^\circ\text{C/W}$ |
| $R_{th(j-a)}$ | Thermal resistance | Junction to ambient | | 95 | $^\circ\text{C/W}$ |