

ELECTRICAL CHARACTERISTICS ($T_j=25$ unless otherwise specified)

| Symbol | Test Condition | Quadrant | Value | | Unit |
|-------------|---|----------|-------|-----|-----------|
| I_{GT} | $V_D=12V R_L=33$ | - - | MAX. | 5 | mA |
| | | | | 10 | |
| V_{GT} | | ALL | MAX. | 1 | V |
| V_{GD} | $V_D=V_{DRM} T_j=125$ $R_L=3.3k$ | ALL | MIN. | 0.2 | V |
| I_L | $I_G=1.2I_{GT}$ | - - | MAX. | 15 | mA |
| | | | | 20 | |
| I_H | $I_T=500mA$ | | MAX. | 10 | mA |
| dV/dt | $V_D=400V$ Gate Open $T_j=110$ | | MIN. | 50 | $V/\mu s$ |
| $(dV/dt)_c$ | $(dI/dt)_c=5A/ms, T_j=110$ | | MIN. | 2 | $V/\mu s$ |
| t_{on} | $I_G=20mA I_A=200mA I_R=20mA$ $T_j=25$ | | TYP. | 3 | μs |
| t_{off} | | | | 30 | |

STATIC CHARACTERISTICS

| Symbol | Parameter | | Value(MAX.) | Unit |
|-----------|---------------------------|-----------|-------------|---------|
| V_{TM} | $I_{TM}=15A t_p=380\mu s$ | $T_j=25$ | 1.6 | V |
| V_{TO} | Threshold voltage | $T_j=125$ | 0.8 | V |
| R_D | Dynamic resistance | $T_j=125$ | 41 | m |
| I_{DRM} | $V_D=V_{DRM} V_R=V_{RRM}$ | $T_j=25$ | 5 | μA |
| I_{RRM} | | $T_j=125$ | 0.4 | mA |

THERMAL RESISTANCES

| Symbol | Parameter | Value | Unit |
|---------------|--------------------------|-------|------|
| $R_{th(j-c)}$ | junction to case (AC) | 3 | $/W$ |
| $R_{th(j-a)}$ | junction to ambient (AC) | 100 | $/W$ |

FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature

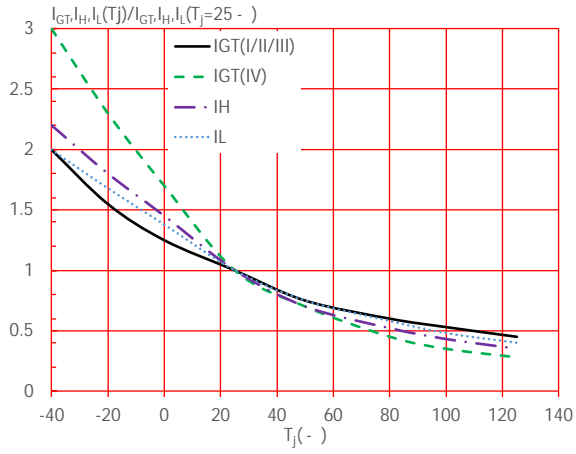


FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



DELIVERY MODE

