



|                                                                      |          |   |    |
|----------------------------------------------------------------------|----------|---|----|
| Peak pulse voltage<br>( $T_j=25$ ; non-repetitive, off-state; FIG.8) | $V_{pp}$ | 4 | kV |
|----------------------------------------------------------------------|----------|---|----|

## ELECTRICAL CHARACTERISTICS (unless otherwise specified)

| Symbol      | Test Condition                      | Quadrant | Value |     | Unit |
|-------------|-------------------------------------|----------|-------|-----|------|
| $I_{GT}$    | $V_D=12V$ $R_L=33$                  | - -      | MAX.  | 10  | mA   |
| $V_{GT}$    |                                     | - -      | MAX.  | 1   | V    |
| $V_{GD}$    | $V_D=V_{DRM}$ $T=125$<br>$R_L=3.3k$ | - -      | MIN.  | 0.2 | V    |
| L           | $I_G=1.2I_{GT}$                     |          |       |     |      |
|             |                                     |          |       | 30  |      |
| H           | $I_T$                               |          |       |     |      |
| $dV/dt$     | $V_D=670V$ Gate Open $T_j=125$      |          | MIN.  | 300 | V/s  |
| $(dI/dt)_c$ | $(dV/dt)_c=10^9$ $V_j=125$          |          | MIN.  | 1.5 | A/ms |



FIG.1: Maximum power dissipation versus RMS on-state current

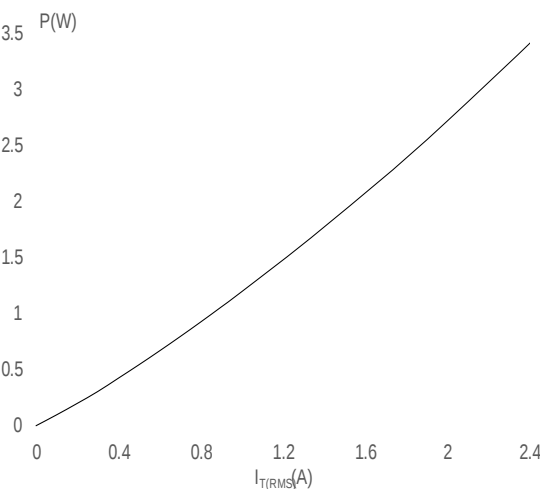


FIG.3: RMS on-state current versus ambient temperature (printed circuit board FR4, copper thickness: P IXOO F\FOH

FIG.2: RMS on-state current versus case temperature

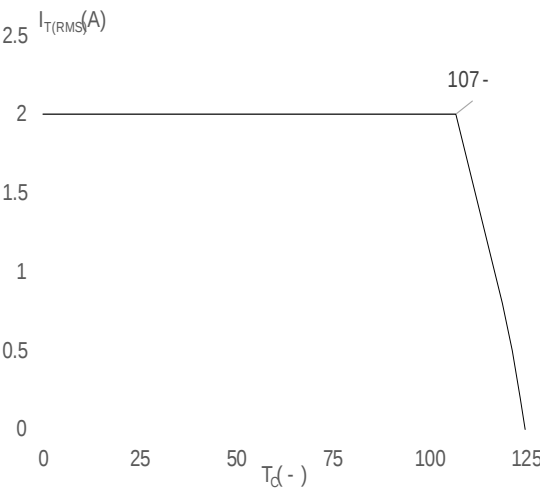
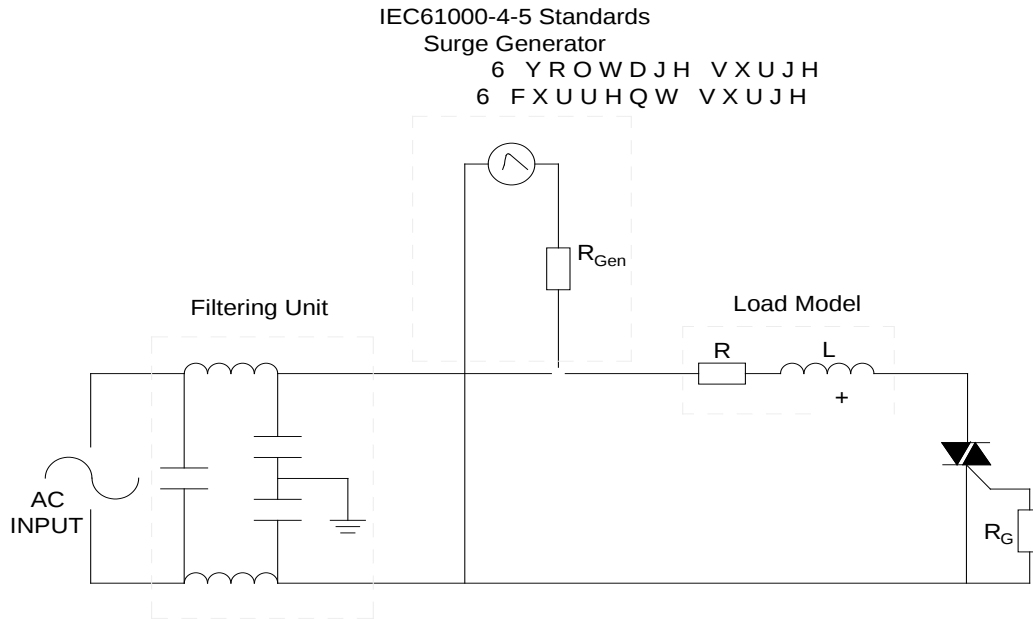


FIG.4: Surge peak on-state current versus number of cycles

JST02K-1000SW

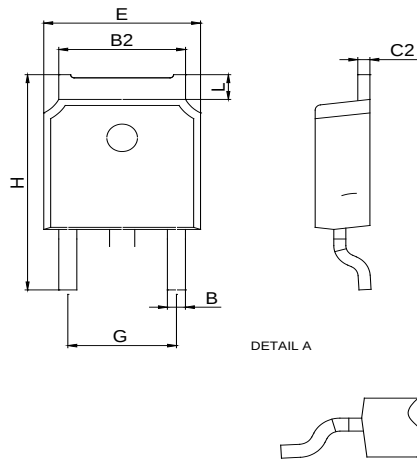
FIG.8 ÖTest circuit for inductive and resistive loads to IEC-61000-4-5 standards



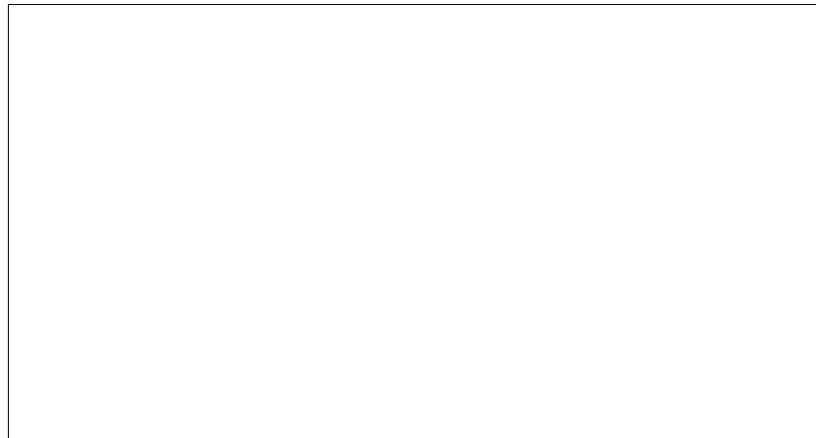
ORDERING INFORMATION

| Order code | Voltage<br>V <sub>DRM</sub> /V <sub>RRM</sub> (V) | IGT(mA) | Package | Base qty.<br>(pcs) | Delivery<br>mode |
|------------|---------------------------------------------------|---------|---------|--------------------|------------------|
|            |                                                   | H- I- J |         |                    |                  |

## PACKAGE MECHANICAL DATA



| Ref. | Dimensions  |      |      |        |      |       |
|------|-------------|------|------|--------|------|-------|
|      | Millimeters |      |      | Inches |      |       |
|      | Min.        | Typ. | Max. | Min.   | Typ. | Max.  |
| A    | 2.10        |      | 2.50 | 0.083  |      | 0.098 |
| A2   | 0           |      | 0.15 | 0      |      | 0.006 |
| B    | 0.66        |      | 0.86 | 0.026  |      | 0.034 |
| B2   | 5.18        |      | 5.48 | 0.202  |      | 0.216 |
| C    | 0.40        |      | 0.60 | 0.016  |      | 0.024 |
| C2   | 0.44        |      | 0.58 | 0.017  |      | 0.023 |
| D    | 5.90        |      | 6.30 | 0.232  |      | 0.248 |
| D1   |             |      |      |        |      |       |
| E    | 6.40        |      | 6.80 | 0.252  |      | 0.268 |
| E1   | 4.63        |      |      | 0.182  |      |       |
| G    | 4.47        |      | 4.67 | 0.176  |      | 0.184 |
| G1   | 2.18        |      | 2.38 | 0.086  |      | 0.094 |
|      |             |      |      |        |      |       |
| L    | 1.09        |      | 1.21 | 0.043  |      | 0.048 |
| L2   | 1.35        |      | 1.65 | 0.053  |      | 0.065 |
|      |             |      |      |        |      |       |



DELIVERY MODE

