



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

| Symbol               | Test Condition                                                                        | Quadrant | Value |     | Unit |
|----------------------|---------------------------------------------------------------------------------------|----------|-------|-----|------|
| I <sub>GT</sub>      | V <sub>D</sub> =12V R <sub>L</sub> =33Ω                                               | - -      | MAX.  | 5   | mA   |
|                      |                                                                                       |          |       | 10  |      |
| V <sub>GT</sub>      |                                                                                       | ALL      | MAX.  | 1.3 | V    |
| V <sub>GD</sub>      | V <sub>D</sub> =V <sub>DRM</sub> T <sub>j</sub> =125<br>R <sub>L</sub> =3.3kΩ         | ALL      | MIN.  | 0.2 | V    |
| I <sub>L</sub>       | I <sub>G</sub> =1.2I <sub>GT</sub>                                                    | - -      | MAX.  | 10  | mA   |
|                      |                                                                                       |          |       | 20  |      |
| I <sub>H</sub>       | I <sub>T</sub> =100mA                                                                 |          | MAX.  | 7   | mA   |
| dV/dt                | V <sub>D</sub> =540V Gate Open T <sub>j</sub> =110                                    |          | MIN.  | 100 | V/μs |
| (dV/dt) <sub>c</sub> | (dI/dt) <sub>c</sub> =1.8A/ms, T <sub>j</sub> =110                                    |          | MIN.  | 2.5 | V/μs |
| t <sub>on</sub>      | I <sub>G</sub> =20mA I <sub>A</sub> =200mA I <sub>R</sub> =20mA<br>T <sub>j</sub> =25 |          | TYP.  | 2.5 | μs   |
| t <sub>off</sub>     |                                                                                       |          |       | 25  |      |

## STATIC CHARACTERISTICS

| Symbol    | Parameter                   |           | Value(MAX.) | Unit      |
|-----------|-----------------------------|-----------|-------------|-----------|
| $V_{TM}$  | $I_{TM}=5A$ $t_p=380\mu s$  | $T_j=25$  | 1.55        | V         |
| $V_{TO}$  | Threshold voltage           | $T_j=125$ | 0.92        | V         |
| $R_D$     | Dynamic resistance          | $T_j=125$ | 107         | $m\Omega$ |
| $I_{DRM}$ | $V_D=V_{DRM}$ $V_R=V_{RRM}$ | $T_j=25$  | 5           | $\mu A$   |
| $I_{RRM}$ |                             | $T_j=125$ | 0.35        | mA        |

## THERMAL RESISTANCES

| Symbol        | Parameter                | Value | Unit |
|---------------|--------------------------|-------|------|
| $R_{th(j-c)}$ | junction to case (AC)    | 18    | /W   |
| $R_{th(j-a)}$ | junction to ambient (AC) | 150   | /W   |

ORDERING INFORMATION

\_\_\_\_\_ J   ST   134   V   -800   D

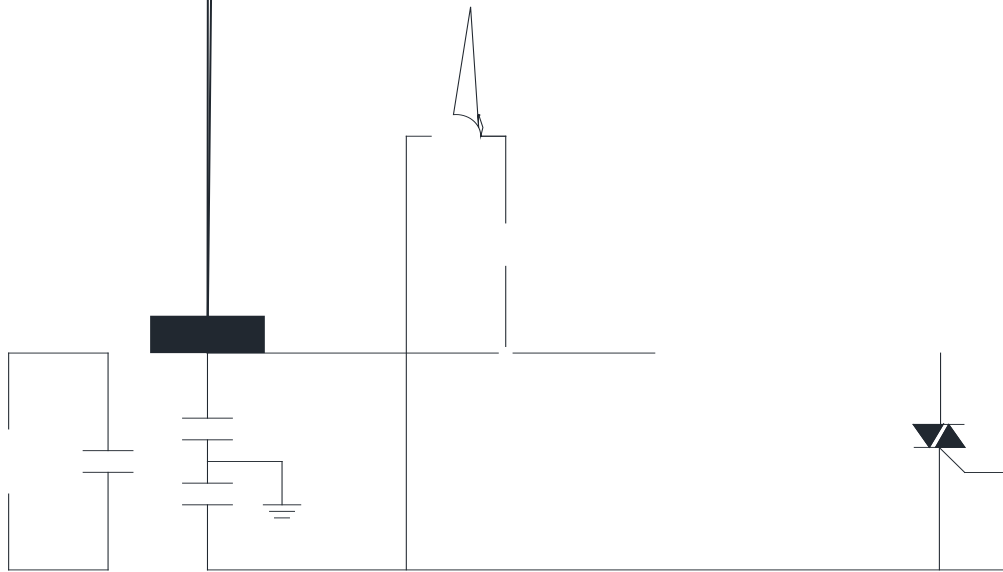
**FIG.1:** Maximum power dissipation versus RMS on-state current



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



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





PACKAGE MECHANICAL DATA

| Ref. | Dimensions  |      |      |        |       |       |
|------|-------------|------|------|--------|-------|-------|
|      | Millimeters |      |      | Inches |       |       |
|      | Min.        | Typ. | Max. | Min.   | Typ.  | Max.  |
| A    | 1.50        |      | 1.80 | 0.059  |       | 0.071 |
| A1   |             |      |      |        | 0.002 |       |
| B    | 2.90        |      | 3.10 | 0.114  |       | 0.122 |
| B1   | 0.60        |      | 0.80 | 0.024  |       | 0.031 |
| C    | 0.22        |      | 0.32 | 0.009  |       | 0.013 |
|      | 6.30        |      | 6.70 | 0.248  |       | 0.264 |
|      | 3.30        |      | 3.70 | 0.130  |       | 0.146 |
| H    | 1.50        |      | 2.00 | 0.059  |       | 0.079 |
| J    | 6.70        |      | 7.30 | 0.264  |       | 0.287 |
| K    |             |      |      |        |       |       |



DELIVERY MODE

| Ref. | Dimensions  |       |       |        |       |       |
|------|-------------|-------|-------|--------|-------|-------|
|      | Millimeters |       |       | Inches |       |       |
|      | Min.        | Typ.  | Max.  | Min.   | Typ.  | Max.  |
| W    | -           |       | 12.30 | -      |       | 0.482 |
| E    | 1.65        | 1.75  | 1.85  | 0.065  | 0.069 | 0.073 |
| F    | 5.45        | 5.50  | 5.55  | 0.215  | 0.217 | 0.219 |
| D0   |             | 1.55  | 1.60  |        | 0.061 | 0.063 |
| D1   |             | -     | -     |        |       |       |
| P0   | 3.90        | 4.00  | 4.10  | 0.154  | 0.157 | 0.161 |
| P1   | 7.90        | 8.00  | 8.10  | 0.311  | 0.315 | 0.319 |
| P2   | 1.95        | 2.00  | 2.05  | 0.077  | 0.079 | 0.081 |
| 10P0 | 39.80       | 40.00 | 40.20 | 1.567  | 1.575 | 1.583 |
| A0   | 6.85        | 6.95  | 7.05  | 0.269  | 0.273 | 0.276 |
| B0   | 7.15        | 7.25  | 7.35  | 0.280  | 0.284 | 0.288 |
| K0   | 1.95        | 2.05  | 2.15  | 0.076  | 0.080 | 0.084 |
| T    | 0.20        | 0.25  | 0.30  | 0.008  | 0.010 | 0.012 |

Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co., Ltd. assumes no responsibility for the consequences of use without consideration for such information nor use beyond it. Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement.

Products and information provided in this document have no infringement of patents. Jiangsu JieJie assumes no responsibility for any infringement of other rights of third parties which may result from the use of such products and information. This document supersedes and replaces all information previously supplied.



is a registered trademark of Jiangsu JieJie Microelectronics Co., Ltd.

Copyright © 2025 Jiangsu JieJie Microelectronics Co., Ltd. All rights reserved.