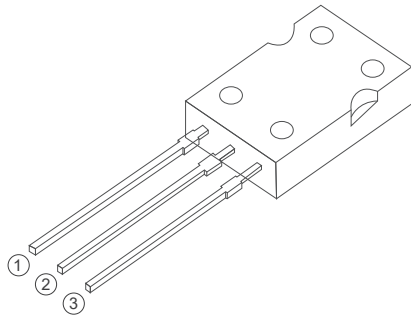


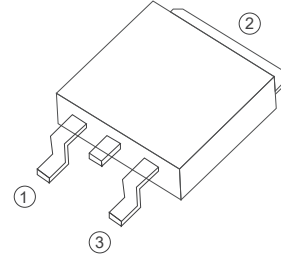
BT134 Series  
4A TRIACs  
4 Quadrants TRIACs



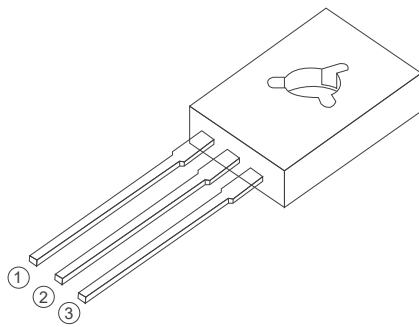
ShenZhenHanKingyuan  
Electronic CO.,Ltd



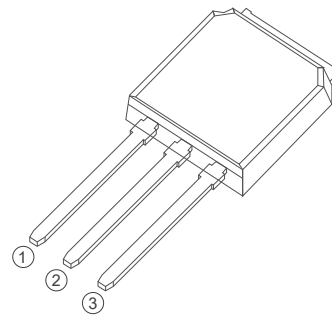
SOT-82(TO-126P)



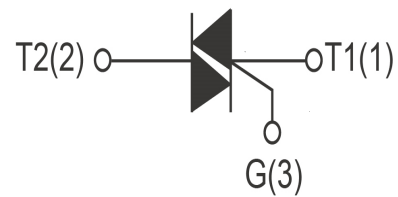
TO-252



TO-126



TO-251



## FEATURES

> IT(RMS): 4A    > VGT: 1.5V    > VDRM VRRM:800V

## APPLICATIONS

Washing machine,vacuums, massager,solid state relay, AC Motor speed regulation and so on.

### Absolute Maximum Ratings (T<sub>J</sub>=25°C unless otherwise specified)

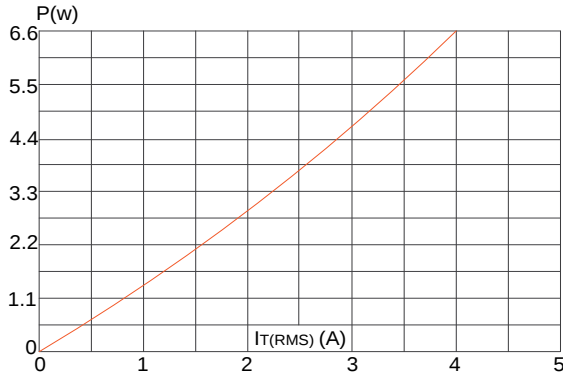
| Symbol                               | Parameter                         | Conditions                                  | Ratings | Unit             |
|--------------------------------------|-----------------------------------|---------------------------------------------|---------|------------------|
| V <sub>DRM</sub><br>V <sub>RRM</sub> | Repetitive Peak Off-State Voltage | BT134-600                                   | 600     | V                |
| I <sub>T(RMS)</sub>                  | R.M.S On-State Current            | T <sub>c</sub> =110°C                       | 4       | A                |
| I <sub>TSM</sub>                     | Surge On-State Current            | t <sub>p</sub> =16.7ms/t <sub>p</sub> =10ms | 25/27   | A                |
| I <sup>2</sup> t                     | I <sup>2</sup> t for fusing       | T <sub>p</sub> =10ms                        | 3.1     | A <sup>2</sup> s |
| P <sub>G(AV)</sub>                   | Average Gate Power Dissipation    | T <sub>J</sub> =125°C                       | 0.5     | W                |
| I <sub>GM</sub>                      | Peak Gate Current                 | t <sub>p</sub> =20us T <sub>J</sub> =125°C  | 2       | A                |
| T <sub>J</sub>                       | Operating Junction Temperature    |                                             | ~40~125 | °C               |
| T <sub>STG</sub>                     | Storage Temperature               |                                             | ~40~150 | °C               |

### Electrical Characteristics (T<sub>J</sub>=25°C unless otherwise specified)

| Symbol         | Parameter                                     |          | Test Conditions                                                                | Value |     | Unit |
|----------------|-----------------------------------------------|----------|--------------------------------------------------------------------------------|-------|-----|------|
|                |                                               |          |                                                                                | D     | E   |      |
| IDRM           | Repetitive Peak Off-State Current             |          | T <sub>J</sub> =25°C                                                           | ≤10   |     | uA   |
|                |                                               |          | T <sub>J</sub> =125°C                                                          | ≤0.5  |     | mA   |
| IRRM           | Repetitive Peak Reverse Current               |          | T <sub>J</sub> =25°C                                                           | ≤10   |     | uA   |
|                |                                               |          | T <sub>J</sub> =125°C                                                          | ≤0.5  |     | mA   |
| VTM            | Forward "on" voltage                          |          | I <sub>T</sub> =5A t <sub>p</sub> =380us                                       | ≤1.7  |     | V    |
| VGD            | gate non-trigger voltage                      |          | V <sub>D</sub> =12V, T <sub>J</sub> =125°C                                     | ≥0.2  |     | V    |
| I <sub>H</sub> | Holding current                               |          | V <sub>D</sub> =12V ,I <sub>GT</sub> =0.1A                                     | ≤10   | ≤15 | mA   |
| VGT            | Gate trigger voltage                          |          | V <sub>D</sub> =12V                                                            | ≤1.5  |     | V    |
| IGT            | Gate trigger current                          | I,II,III | V <sub>D</sub> =12V,I <sub>GT</sub> =0.1A                                      | ≤5    | ≤10 | mA   |
|                |                                               | IV       |                                                                                | ≤10   | ≤25 | mA   |
| di/dt          | Critical-rate of rise of commutation current. | I,II,III | I <sub>T</sub> =6A ,I <sub>GT</sub> =0.2A,<br>dI <sub>g</sub> /dt=0.2A/us      | ≥50   |     | A/us |
|                |                                               | IV       |                                                                                | ≥10   |     | A/us |
| dv/dt          | Critical-rate of rise of commutation voltage  |          | T <sub>J</sub> =125°C V <sub>D</sub> =2/3V <sub>DRM</sub><br>Gate open circuit | ≥5    | ≥50 | V/us |

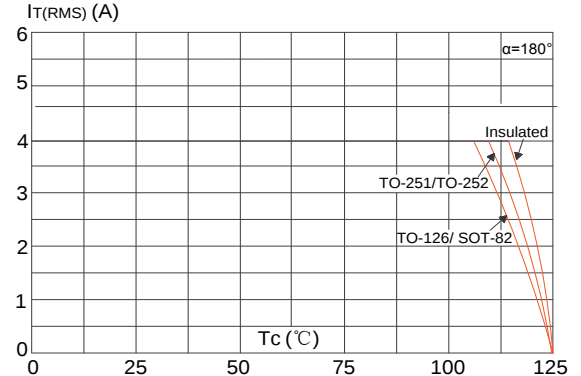
**FIG1**

Maximum power dissipation versus RMS on-state current



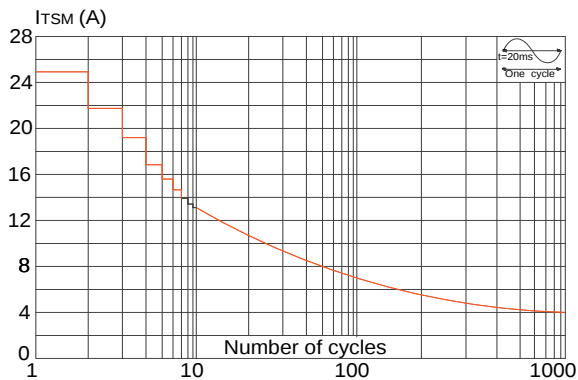
**FIG2**

RMS on-state current versus case temperature



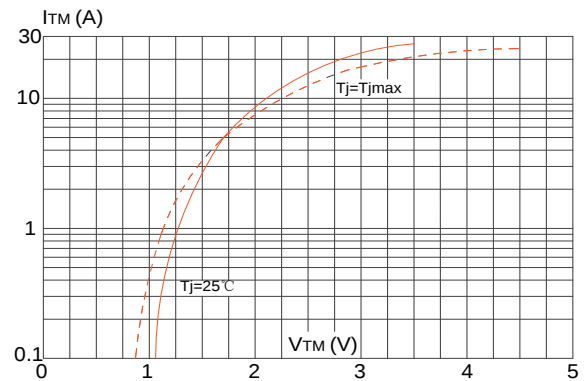
**FIG3**

Surge peak on-state current versus number of cycles



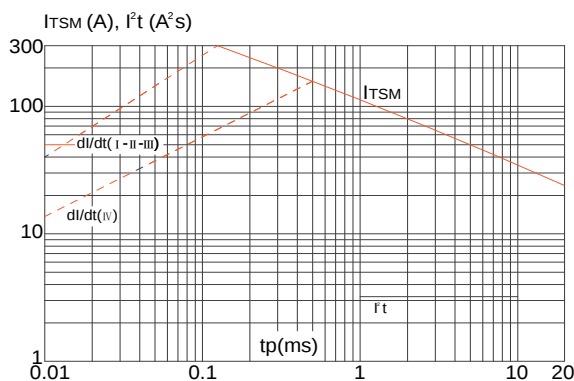
**FIG4**

On-state characteristics (maximum values)



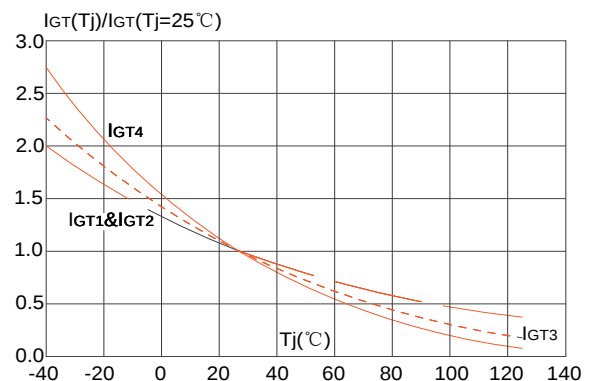
**FIG5**

Non-repetitive surge peak on-state current for a sinusoidal pulse with width  $t_p < 20\text{ms}$ , and corresponding value of  $I^2t$  ( $di/dt < 100\text{A}/\mu\text{s}$ )



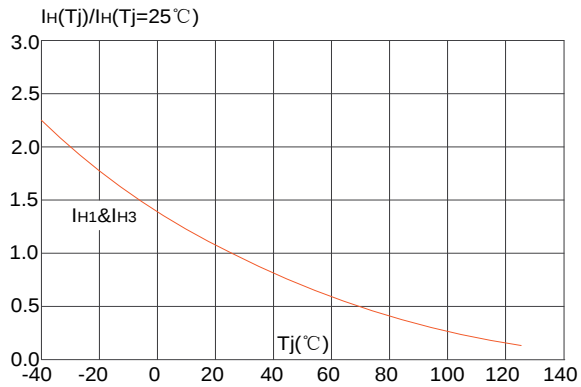
**FIG6**

**FIG.6:** Relative variations of gate trigger current, holding current and latching current versus junction temperature



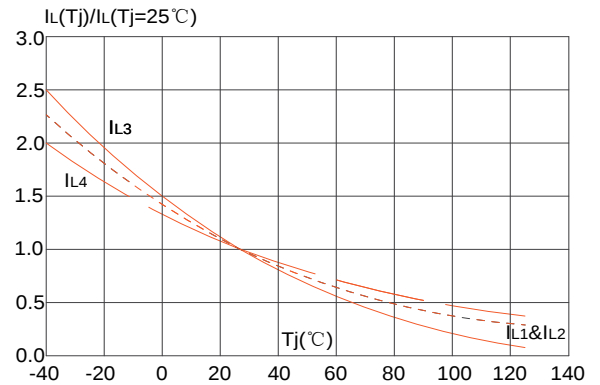
**FIG7**

**FIG.7:** Relative variations of holding current versus junction temperature

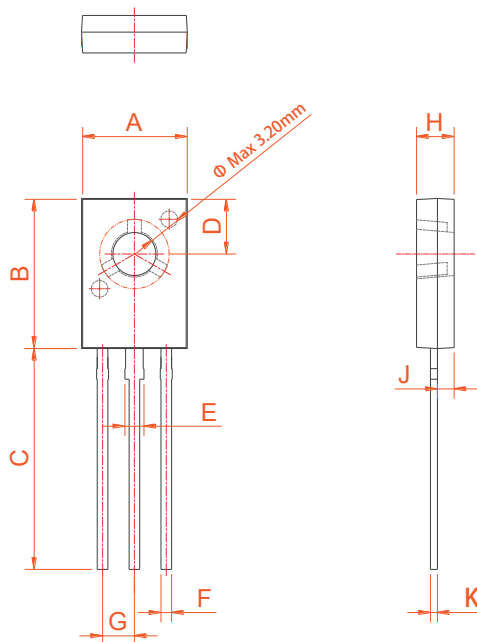


**FIG8**

**FIG.8:** Relative variations of latching current versus junction temperature



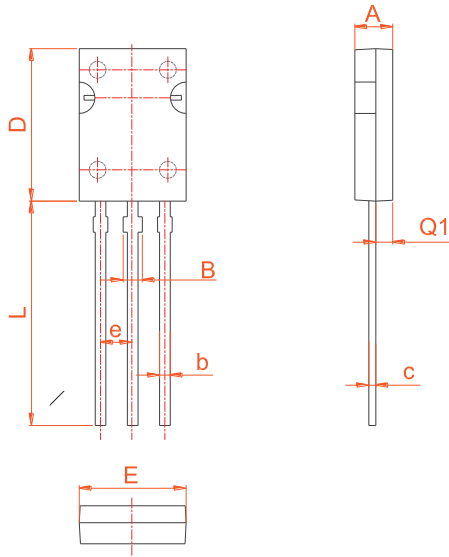
## PACKAGE MECHANICAL DATA



TO-126

| Ref. | Dimensions  |      |      |        |       |       |
|------|-------------|------|------|--------|-------|-------|
|      | Millimeters |      |      | Inches |       |       |
|      | Min.        | Typ. | Max. | Min.   | Typ.  | Max.  |
| A    | 7.40        |      | 7.80 | 0.291  |       | 0.307 |
| B    | 10.6        |      | 11.2 | 0.417  |       | 0.441 |
| C    | 15.3        |      | 16.3 | 0.602  |       | 0.642 |
| D    | 3.90        |      | 4.10 | 0.154  |       | 0.161 |
| E    | 1.17        |      | 1.47 | 0.046  |       | 0.058 |
| F    | 0.66        |      | 0.86 | 0.026  |       | 0.034 |
| G    |             | 2.29 |      |        | 0.090 |       |
| H    | 2.50        |      | 2.90 | 0.098  |       | 0.114 |
| J    | 1.10        |      | 1.50 | 0.043  |       | 0.059 |
| K    | 0.45        |      | 0.60 | 0.018  |       | 0.024 |

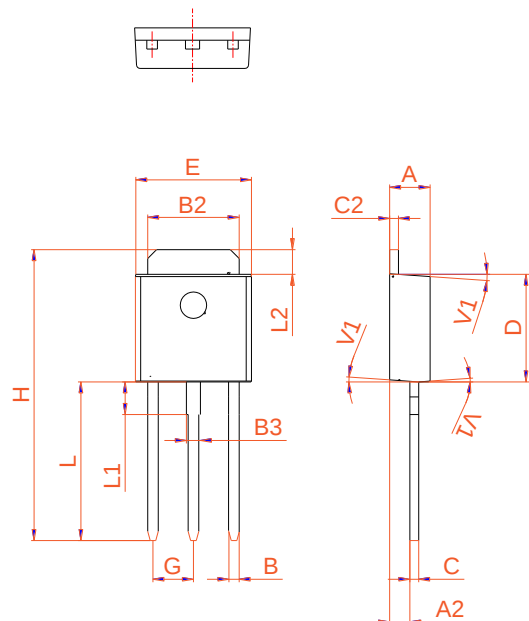
# PACKAGE MECHANICAL DATA



SOT-82

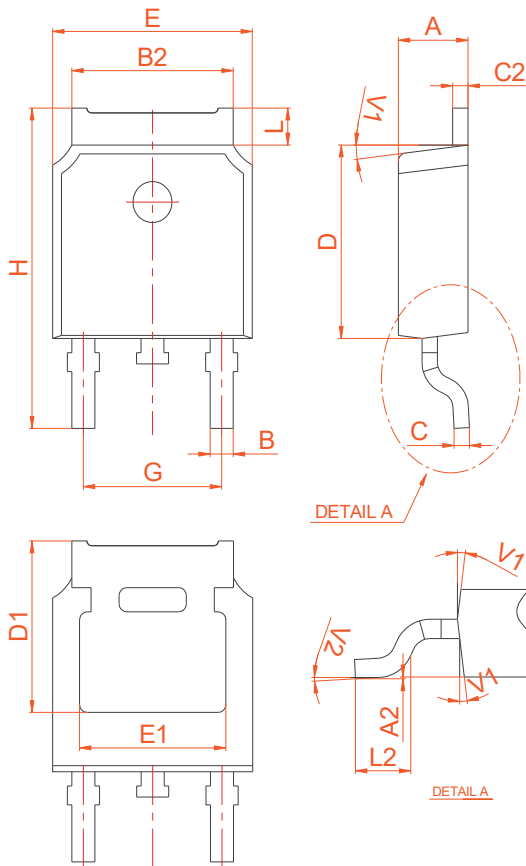
| Ref. | Dimensions  |       |       |        |       |       |
|------|-------------|-------|-------|--------|-------|-------|
|      | Millimeters |       |       | Inches |       |       |
|      | Min.        | Typ.  | Max.  | Min.   | Typ.  | Max.  |
| A    | 2.45        | 2.55  | 2.65  | 0.096  | 0.100 | 0.104 |
| b    | 0.71        | 0.76  | 0.81  | 0.028  | 0.030 | 0.032 |
| B    | 1.27        | 1.37  | 1.45  | 0.050  | 0.054 | 0.057 |
| c    | 0.48        | 0.50  | 0.52  | 0.019  | 0.020 | 0.021 |
| D    | 10.60       | 10.80 | 11.00 | 0.417  | 0.425 | 0.433 |
| E    | 7.30        |       | 7.70  | 0.287  |       | 0.303 |
| e    | 2.24        | 2.29  | 2.34  | 0.088  | 0.090 | 0.092 |
| L    | 15.30       | 15.60 | 15.90 | 0.602  | 0.614 | 0.626 |
| Q1   | 1.17        | 1.27  | 1.37  | 0.046  | 0.050 | 0.054 |

| Ref. | Dimensions  |      |      |        |       |       |
|------|-------------|------|------|--------|-------|-------|
|      | Millimeters |      |      | Inches |       |       |
|      | Min.        | Typ. | Max. | Min.   | Typ.  | Max.  |
| A    | 2.20        |      | 2.40 | 0.086  |       | 0.095 |
| A2   | 0.90        |      | 1.20 | 0.035  |       | 0.047 |
| B    | 0.55        |      | 0.65 | 0.022  |       | 0.026 |
| B2   | 5.10        |      | 5.40 | 0.200  |       | 0.213 |
| B3   | 0.76        |      | 0.85 | 0.030  |       | 0.033 |
| C    | 0.45        |      | 0.62 | 0.018  |       | 0.024 |
| C2   | 0.48        |      | 0.62 | 0.019  |       | 0.024 |
| D    | 6.00        |      | 6.20 | 0.236  |       | 0.244 |
| E    | 6.40        |      | 6.70 | 0.252  |       | 0.264 |
| G    |             | 2.30 |      |        | 0.091 |       |
| H    | 16.0        |      | 17.0 | 0.630  |       | 0.669 |
| L    | 8.90        |      | 9.40 | 0.350  |       | 0.370 |
| L1   | 1.80        |      | 1.90 | 0.071  |       | 0.075 |
| L2   | 1.37        |      | 1.50 | 0.054  |       | 0.059 |
| V1   |             | 4°   |      |        | 4°    |       |



TO-251

## PACKAGE MECHANICAL DATA



TO-252

| Ref. | Dimensions  |      |      |        |       |       |
|------|-------------|------|------|--------|-------|-------|
|      | Millimeters |      |      | Inches |       |       |
|      | Min.        | Typ. | Max. | Min.   | Typ.  | Max.  |
| A    | 2.20        |      | 2.40 | 0.086  |       | 0.095 |
| A2   | 0.03        |      | 0.23 | 0.001  |       | 0.009 |
| B    | 0.55        |      | 0.65 | 0.022  |       | 0.026 |
| B2   | 5.10        |      | 5.40 | 0.200  |       | 0.213 |
| C    | 0.45        |      | 0.55 | 0.018  |       | 0.022 |
| C2   | 2.70        |      | 2.90 | 0.106  |       | 0.114 |
| D    | 6.00        |      | 6.20 | 0.236  |       | 0.244 |
| E    | 6.40        |      | 6.70 | 0.252  |       | 0.264 |
| G    | 4.40        |      | 4.70 | 0.173  |       | 0.185 |
| H    | 9.35        |      | 10.6 | 0.368  |       | 0.417 |
| L1   | 1.30        |      | 1.70 | 0.051  |       | 0.067 |
| L2   | 1.37        |      | 1.50 | 0.054  |       | 0.059 |
| L3   |             | 0.8  |      |        | 0.031 |       |
| L4   |             | 0.8  |      |        | 0.031 |       |
| V1   |             | 4°   |      |        | 4°    |       |
| V2   | 0°          |      | 8°   | 0°     |       | 8°    |



ShenZhenHanKingyuan  
Electronic CO.,Ltd

Information furnished is believed to be accurate and reliable. However, Shenzhen HanKingyuan Electronic assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied.

The KY logo is a registered trademark of Shenzhen HanKingyuan Electronic.

©2013 Shenzhen HanKingyuan Electronic – Printed in Shenzhen – All Rights Reserved

单击下面可查看定价，库存，交付和生命周期等信息

[>>KY\(韩景元\)](#)