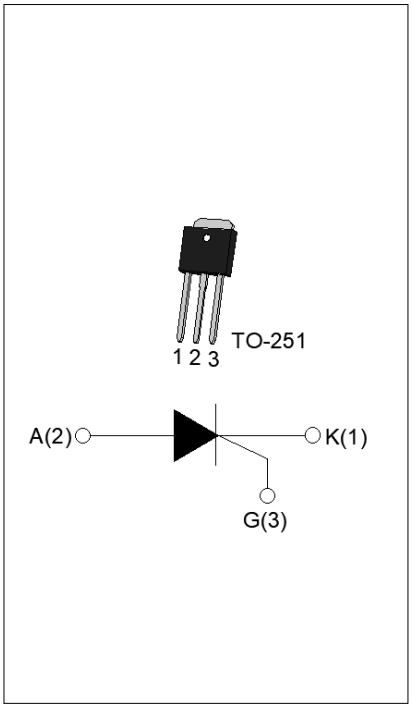
## JCT151H-800R 12A SCR

Rev.A.1.1

### DESCRIPTION:

With high ability to withstand the shock loading of large current, JCT151H-800R of silicon controlled rectifiers provides high dV/dt rate with strong resistance to electromagnetic interference. It is especially recommended for use on solid state relay, motorcycle, power charger, T-tools etc. Package TO-251 is RoHS compliant.




### MAIN FEATURES

| Symbol | Value | Unit |
|---|---|---|
| $I_{T(RMS)}$ | 12 | A |
| $V_{DRM}/V_{RRM}$ | 800 | V |
| $I_{GT}$ | ≤15 | mA |

### ABSOLUTE MAXIMUM RATINGS

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Storage junction temperature range | $T_{stg}$ | -40-150 | |
| Operating junction temperature range | $T_j$ | -40-125 | |
| Repetitive peak off-state voltage ($T_j$=25 ) | $V_{DRM}$ | 800 | V |
| Repetitive peak reverse voltage ($T_j$=25 ) | $V_{RRM}$ | 800 | V |
| Average on-state current ($T_C \leq$ 49 ) | $I_{T(AV)}$ | 7.5 | A |
| RMS on-state current ($T_C \leq$ 49 ) | $I_{T(RMS)}$ | 12 | A |
| Non repetitive surge peak on-state current ($t_p$=10ms, $T_j$=25 ) | $I_{TSM}$ | 120 | A |
| Non repetitive surge peak on-state current ($t_p$=8.3ms, $T_j$=25 ) | | 132 | |
| $I^2t$ value for fusing ($t_p$=10ms , $T_j$=25 ) | $I^2t$ | 72 | $A^2s$ |
| Critical rate of rise of on-state current ($I_G$=2 $I_{GT}$, f=100Hz , $T_j$=125 ) | dI/dt | 100 | A/μs |
| Peak gate current ($t_p$=20μs , $T_j$=125 ) | $I_{GM}$ | 4 | A |

**JCT151H-800R** **JieJie M**

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

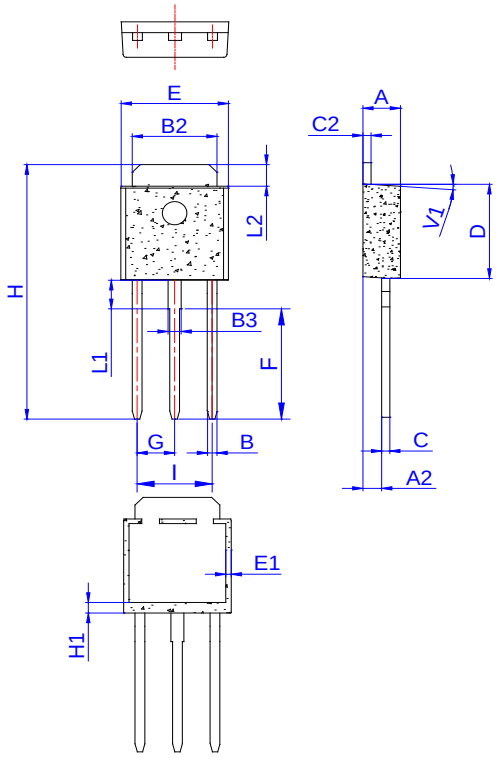


**FIG.2:** RMS on-state current versus case temperature

FIG.7 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 | 2.20 | | 2.40 | 0.086 | | 0.095 |
| A2 | 1.00 | | 1.30 | 0.039 | | 0.051 |
| B | 0.50 | | 0.70 | 0.020 | | 0.028 |
| B2 | 5.10 | | 5.40 | 0.200 | | 0.213 |
| B3 | 0.70 | | 1.00 | 0.028 | | 0.039 |
| C | 0.45 | | 0.62 | | | |
| C2 | 0.48 | | | | | |
| D | | | | | | |
| E | 6.40 | | 6.70 | 0.252 | | 0.264 |
| E1 | 0.60 | | 1.00 | 0.024 | | 0.039 |
| F | 6.90 | | 7.30 | 0.272 | | 0.287 |
| G | 2.20 | | | 0.087 | | |
| H | 16.00 | | 17.00 | 0.630 | | 0.669 |
| H1 | 1.45 | | 1.85 | 0.057 | | 0.073 |
| I | 4.40 | | 4.80 | 0.173 | | 0.189 |
| L1 | | | | | | |
| L2 | 1.25 | | 1.55 | | | |
| V1 | | | | | | |

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

P [(par)7(t)2(i)685(d )0.01 w 37. /MCID 36 >iry