



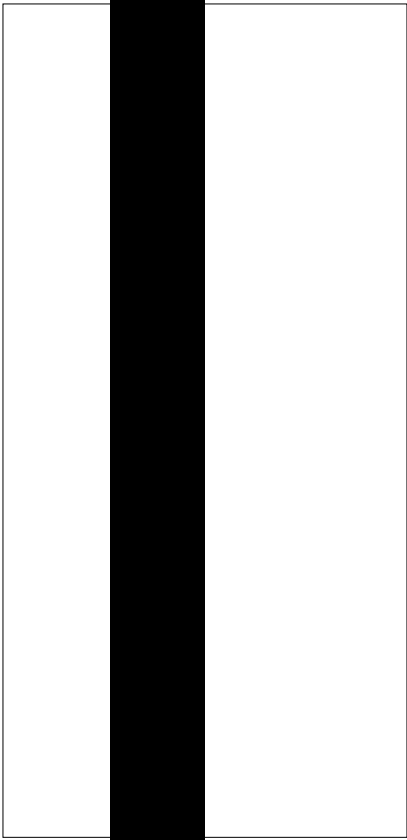
JCT151A-650R 12A SCR

Rev.A.1.1

DESCRIPTION:

With the ability to withstand the shock loading of large current, JCT151A-650R of silicon controlled rectifier 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. From all three terminals to external heatsink, JCT151A-650R provides a rated insulation voltage of 2500 V<sub>RMS</sub>, complying with UL standard (File ref: E252906).

Packaging TO-220A is RoHS compliant.



MEASUREMENTS

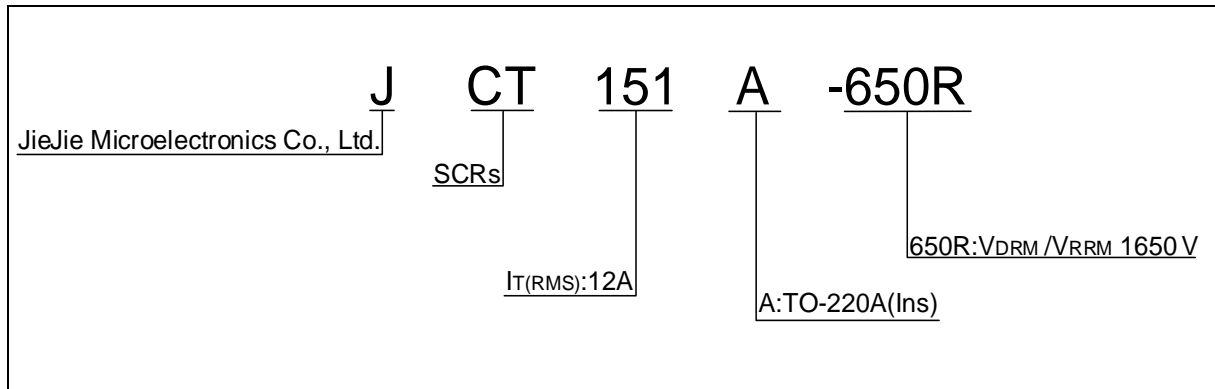
| Parameter                 | Value | Unit |
|---------------------------|-------|------|
| Current (I <sub>T</sub> ) | 12    | A    |
| V <sub>RRM</sub>          | 650   | V    |
|                           | 15    | mA   |

|   |             |     |    |
|---|-------------|-----|----|
| Peak gate current ( $t_p=20 \text{ s}$ , $T_j=125 \text{ }^\circ\text{C}$ )               | $I_{GM}$    | 4   | A  |
| Average gate power dissipation ( $T_j=125 \text{ }^\circ\text{C}$ )                       | $P_{G(AV)}$ | 1   | W  |
| Peak gate power   | $P_{GM}$    | 10  | W  |
| Peak pulse voltage<br>( $T_j=25 \text{ }^\circ\text{C}$ ; non-repetitive,off-state;FIG.7) | $V_{pp}$    | 0.7 | kV |

**ELECTRICAL CHARACTERISTICS** (unless otherwise specified)

| Symbol   | Test Condition | Value |      |      | Unit |
|----------|----------------|-------|------|------|------|
|          |                | MIN.  | TYP. | MAX. |      |
| $I_{GT}$ | $V_D$ MM       |       |      |      |      |

ORDERING INFORMATION



MARKING

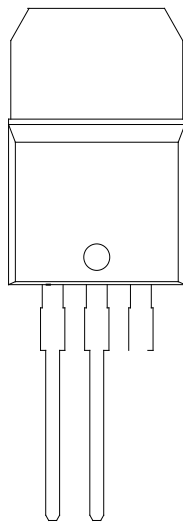


FIG.1: Maximum power dissipation versus RMS on-state current

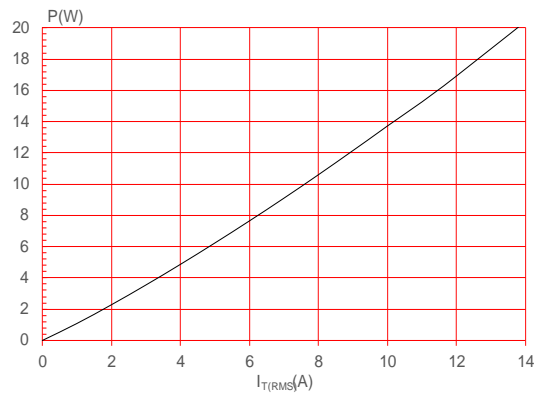
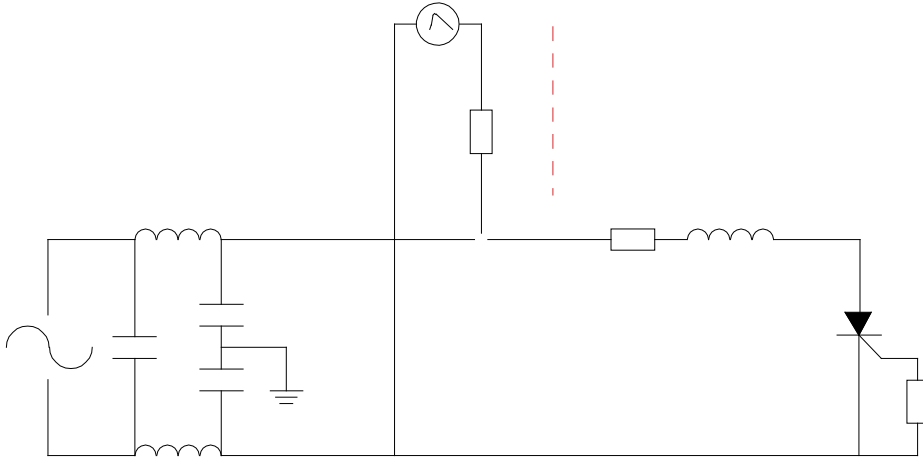


FIG.2: RMS on-state current versus case temperature

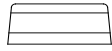
FIG.7 ÖTest circuit for inductive and resistive loads to IEC-61000-4-5 standards.



## ORDERING INFORMATION

| Order code   | Voltage<br>$V_{DRM}/V_{RRM}$ (V) | IGT(mA) | Package      | Base qty.<br>(pcs) | Delivery<br>mode |
|--------------|----------------------------------|---------|--------------|--------------------|------------------|
| JCT151A-650R | 650                              | 15      | TO-220A(Ins) | 50                 | Tube             |

PACKAGE MECHANICAL DATA



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