



T1650H-6A 16A TRIAC

Rev.A.1.0

The T1650H-6A triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. Compared to traditional triaAm (jw)11ctotor h-1s1 ((ot)12 (o004 Tc -0.004 Tw

T1650H-6A
 **JieJie Microelectronics CO., Ltd.**

| | | | |
|--|-------------|----|----|
| Average gate power dissipation ($T_j=150^\circ C$) | $P_{G(AV)}$ | 1 | W |
| Peak gate power | P_{GM} | 10 | W |
| Peak pulse voltage ($T_j=25^\circ C$; non-repetitive, off-state; FIG.7) | V_{pp} | 4 | kV |

($T_j=25^\circ C$ unless otherwise specified)

| Symbol | Test Condition | Quadrant | Value | | Unit |
|----------|---|----------|-------|------|------|
| I_{GT} | $V_D=12V$ $R_L=33\Omega$ | - - | MAX. | 50 | mA |
| V_{GT} | | - - | MAX. | 1 | V |
| V_{GD} | $V_D=V_{DRM}$ $T_j=150^\circ C$ $R_L=3.3K\Omega$ | - - | MIN. | 0.2 | V |
| I_L | $I_G=1.2I_{GT}$ | - | MAX. | 80 | mA |
| | | | | 100 | |
| I_H | $I_T=500mA$ | | MAX. | 60 | mA |
| dV/dt | $V_D=400V$ Gate Open $T_j=150^\circ C$ | | MIN. | 2000 | V/s |
| | $j=150^\circ C$ | | MIN. | 25 | A/ms |

$I_G=80mA$ $I_A=400mA$ $I_R=40mA$ $12s$ mA
 $T_j=25^\circ C$ TYP.

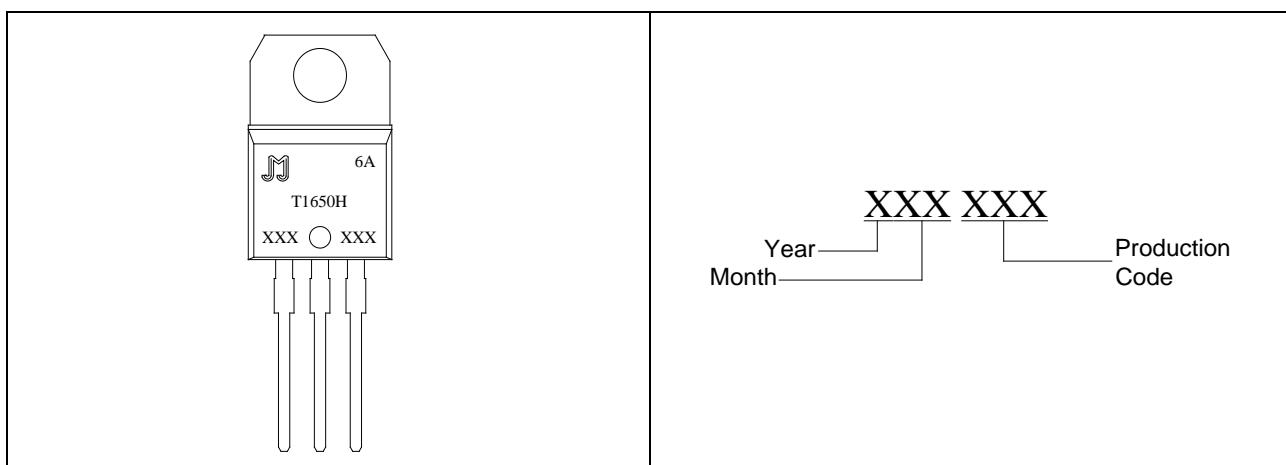
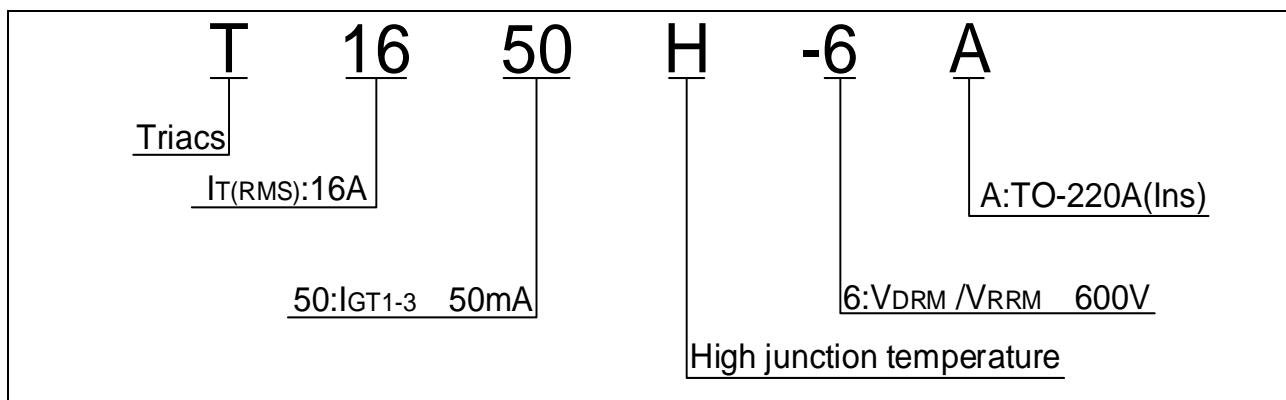


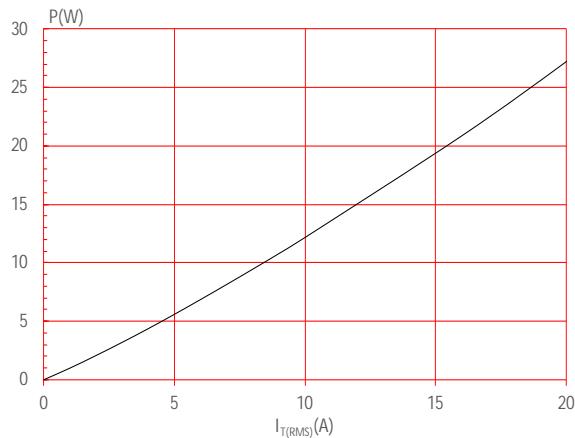
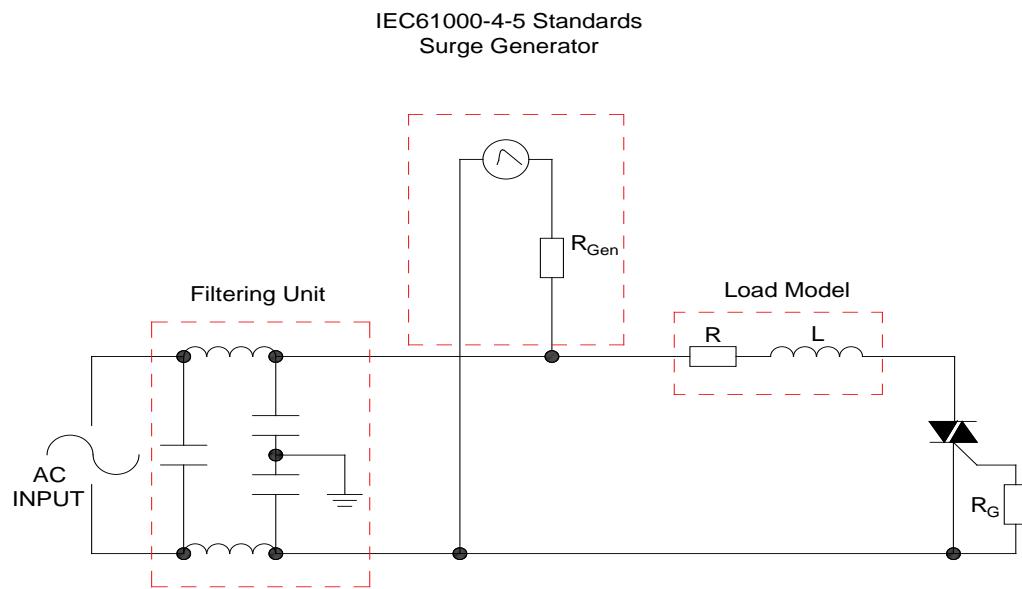
FIG.1 Maximum power dissipation versus RMS on-state current**FIG.2:** RMS on-state current versus case temperature

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

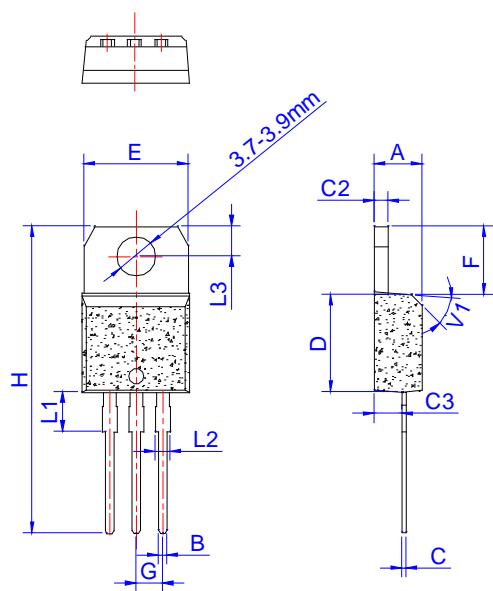


Refer to Instructions for installation of plastic-sealed in-line power devices released by JieJie

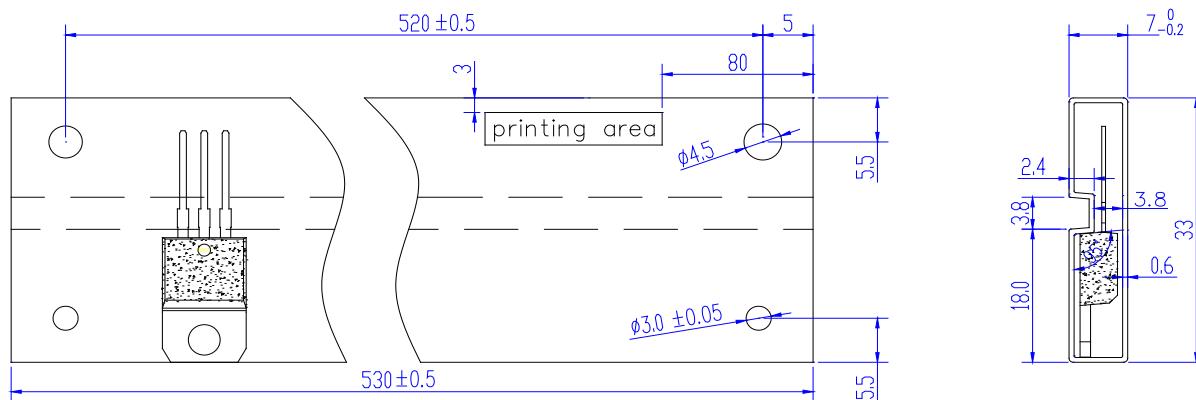
| Order code | Voltage V_{DRM}/V_{RRM} (V) | IGT(mA) | Package | Base qty. (pcs) | Delivery mode |
|------------|----------------------------------|---------|--------------|--------------------|---------------|
| | | - - | | | |
| T1650H-6A | 600 | 50 | TO-220A(Ins) | 50 | Tube |

Document Revision History

| Date | Revision | Changes |
|--------------|----------|--------------|
| Apr.10, 2023 | A.1.0 | Last updated |



| Ref. | Dimensions | | | | | |
|------|-------------|------|------|--------|------|-------|
| | Millimeters | | | Inches | | |
| | Min. | Typ. | Max. | Min. | Typ. | Max. |
| A | 4.40 | | 4.60 | 0.173 | | 0.181 |
| B | 0.61 | | 0.88 | 0.024 | | 0.035 |
| C | 0.46 | | 0.70 | 0.018 | | 0.028 |
| C2 | 1.21 | | 1.32 | 0.048 | | 0.052 |
| C3 | 2.40 | | 2.72 | 0.094 | | 0.107 |
| D | 8.60 | | 9.70 | 0.339 | | 0.382 |
| E | 9.80 | | 10.4 | 0.386 | | 0.409 |
| F | 6.25 | | 6.85 | 0.246 | | 0.270 |
| G | 2.40 | | 2.70 | 0.094 | | 0.106 |
| H | 28.0 | | 29.8 | 1.102 | | 1.173 |
| L1 | 3.45 | | 4.05 | 0.136 | | 0.159 |
| L2 | 1.14 | | 1.70 | 0.045 | | 0.067 |
| L3 | 2.65 | | 2.95 | 0.104 | | 0.116 |
| V1 | | 45° | | | 45° | |



| PACKAGE | OUTLINE | TUBE (PCS) | INNER BOX (PCS) | PER CARTON |
|---------|---------|---------------|--------------------|------------|
| TO-220A | TUBE | 50 | 1,000 | 5,000 |

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