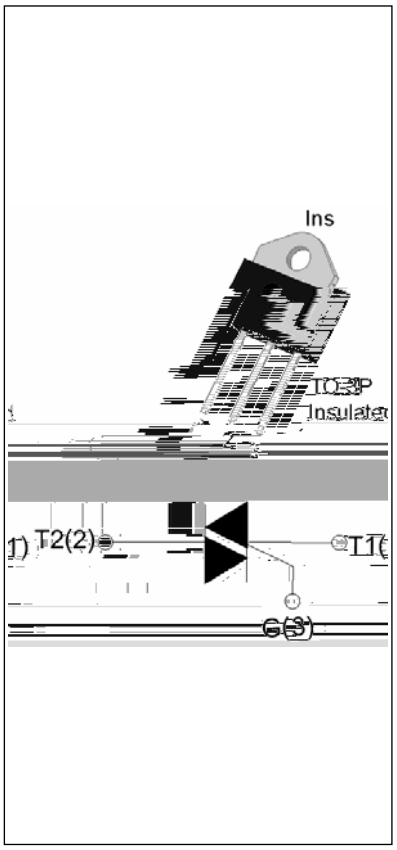
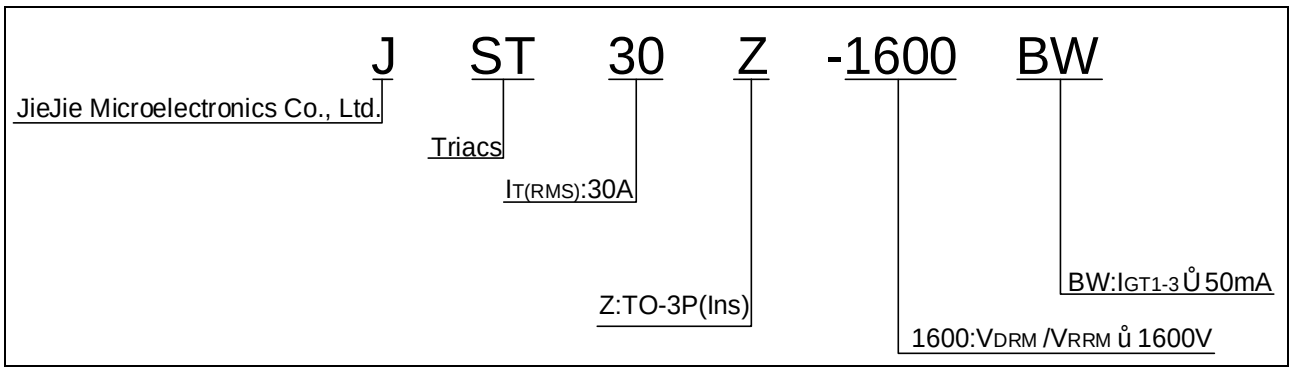
The JST30Z-1600BW triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. JST30Z-1600BW snubberless triac is especially recommended for use on inductive loads. By using an internal ceramic pad, JST30Z-1600BW provides a rated insulation voltage of 2500 VRMS, complying with UL standards (File ref: E252906). Package TO-3P is RoHS compliant.

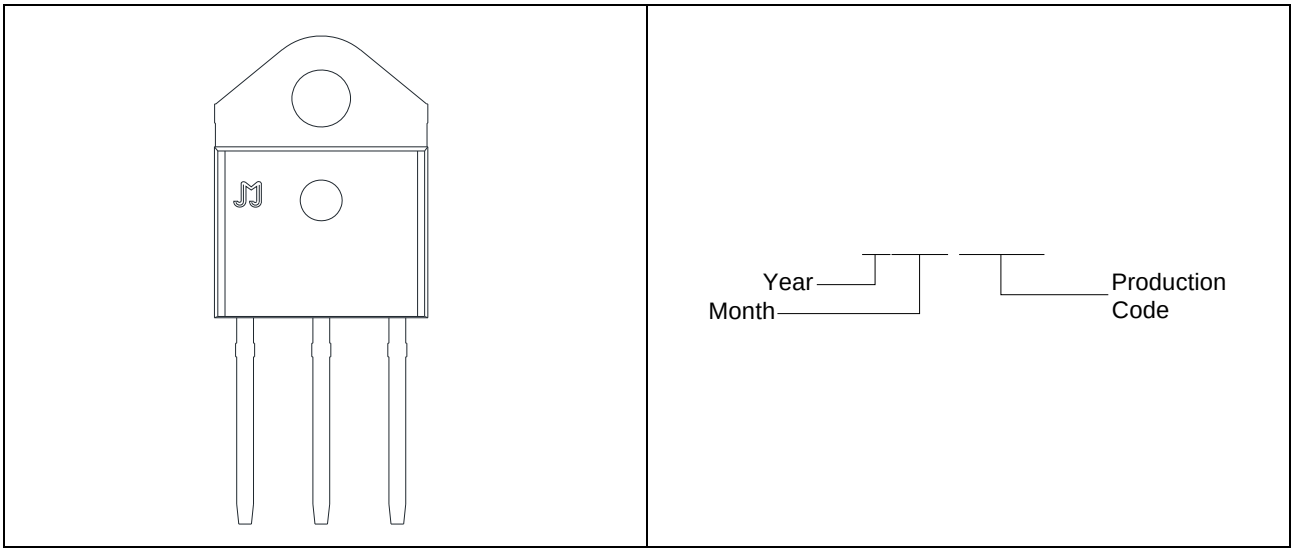



| Symbol | Value | Unit |
|---|---|---|
| $I_{T(RMS)}$ | 30 | A |
| $V_{DRM}$ /$V_{RRM}$ | 1600 | V |
| $I_{GT}$ Ñ/ ñ/ ħ | 50/50/50 | mA |

| | | | |
|---|---|---|---|
| Storage junction temperature range | $T_{stg}$ | -40-150 | Ņ |
| Operating junction temperature range | $T_j$ | -40-125 | Ņ |
| Repetitive peak off-state voltage ($T_j$=25 Ņ) | $V_{DRM}$ | 1600 | V |
| Repetitive peak reverse voltage ($T_j$=25 Ņ) | $V_{RRM}$ | 1600 | V |
| RMS on-state current ($T_C$ Ů 72 Ņ) | $I_{T(RMS)}$ | 30 | A |
| Non repetitive surge peak on-state current (full cycle , $t_p$=20ms , $T_j$=25 Ņ) | $I_{TSM}$ | 300 | A |
| Non repetitive surge peak on-state current (full cycle , $t_p$=16.6ms , $T_j$=25 Ņ) | | 330 | |
| $I^2t$ value for fusing ($t_p$=10ms , $T_j$=25 Ņ) | $I^2t$ | 450 | $A^2s$ |
| Critical rate of rise of on-state current ($I_G$=2 ¦ $I_{GT}$ , f=100Hz , $T_j$=125 Ņ) | dI/dt | 100 | A/µs |
| Peak gate current ($t_p$=20µs , $T_j$=125 Ņ) | $I_{GM}$ | 4 | A |

| | | |
|---|---|---|
| Average gate power dissipation ($T_j$=125℃) | P | |


J
ST
30
Z
-1600
BW
JieJie Microelectronics Co., Ltd.
Triacs
IT(RMS):30A
Z:TO-3P(Ins)
1600:VDRM /VRRM ů 1600V
BW:IGT1-3 Ů 50mA

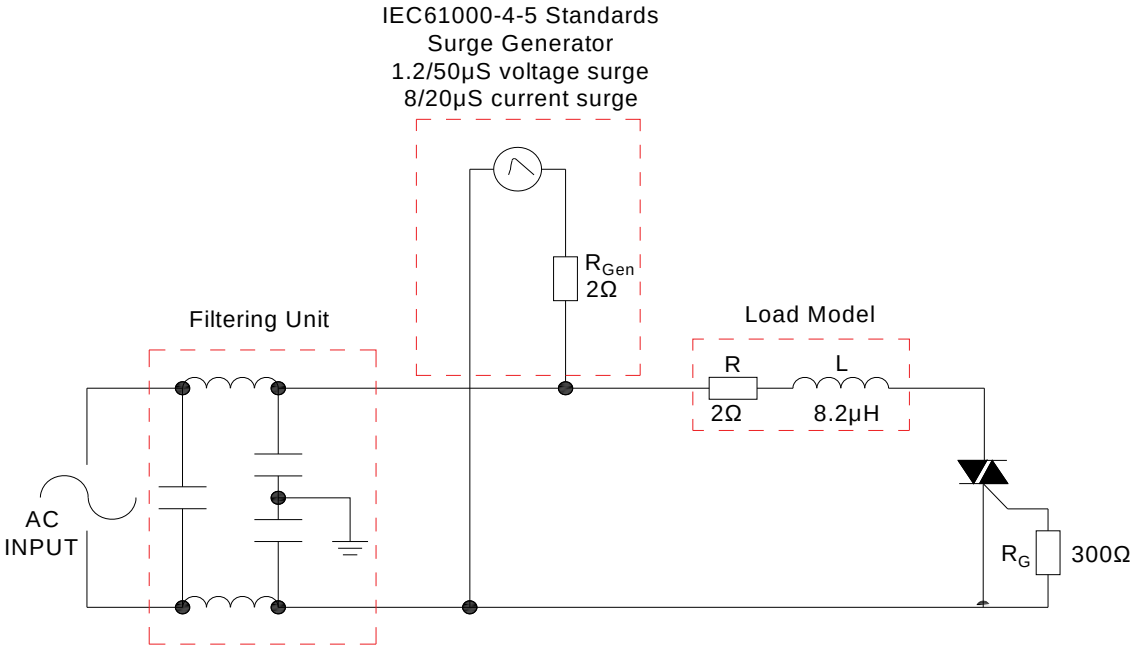

Year
Month
Production
Code

Maximum power dissipation versus RMS on-state current



RMS on-state current versus case temperature

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



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|---|---|---|---|---|---|
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| | | | | | |

| Date | Revision | Changes |
|---|---|---|
| Apr.11, 2023 | A.1.0 | Last updated |
| Oct.16, 2025 | A.1.1 | Revise PACKAGE MECHANICAL DATA |