



JST136Q-800E 4A TRIAC

Rev.A.1.0

The JST136Q-800E 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. From T2 terminals to external heatsink. Package TO-126 is RoHS compliant.

| 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 |

($T_j=25$ unless otherwise specified)

| Symbol | Test Condition | Quadrant | Value | | Unit |
|----------------------|---|----------|-------|-----|------------|
| I_{GT} | $V_D=12V R_L=33$ | - - | MAX. | 10 | mA |
| | | | | 25 | |
| V_{GT} | | ALL | MAX. | 1 | V |
| V_{GD} | $V_D=V_{DRM} T_j=125$ $R_L=3.3K$ | ALL | MIN. | 0.2 | V |
| I_L | $I_G=1.2I_{GT}$ | - | MAX. | 20 | mA |
| | | - | | 30 | |
| I_H | $I_T=100mA$ | | MAX. | 25 | mA |
| dV/dt | $V_D=540V$ Gate Open $T_j=110$ | | MIN. | 250 | V/ μs |
| (dV/dt) _c | (dI/dt) _c =1.8A/ms, $T_j=110$ | | MIN. | 6 | V/ μs |
| t_{on} | $I_G=40mA I_A=200mA I_R=20mA$ $T_j=25$ | | TYP. | 1.5 | μs |
| t_{off} | | | | 15 | |

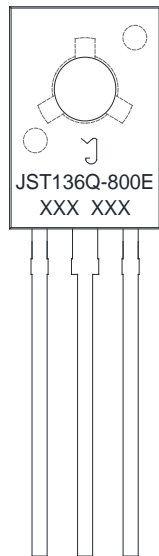
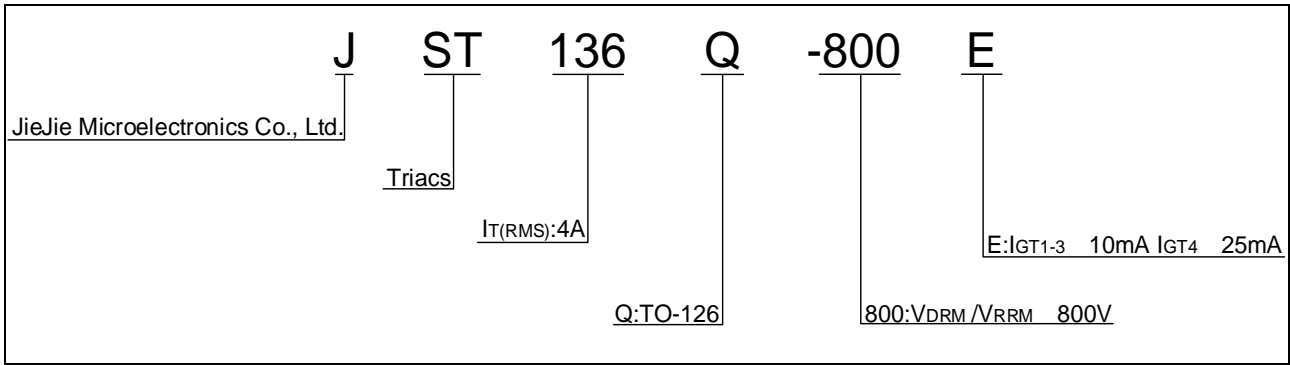


FIG.1 Maximum power dissipation versus RMS on-state current

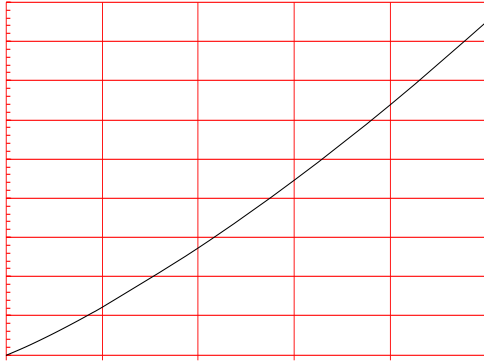
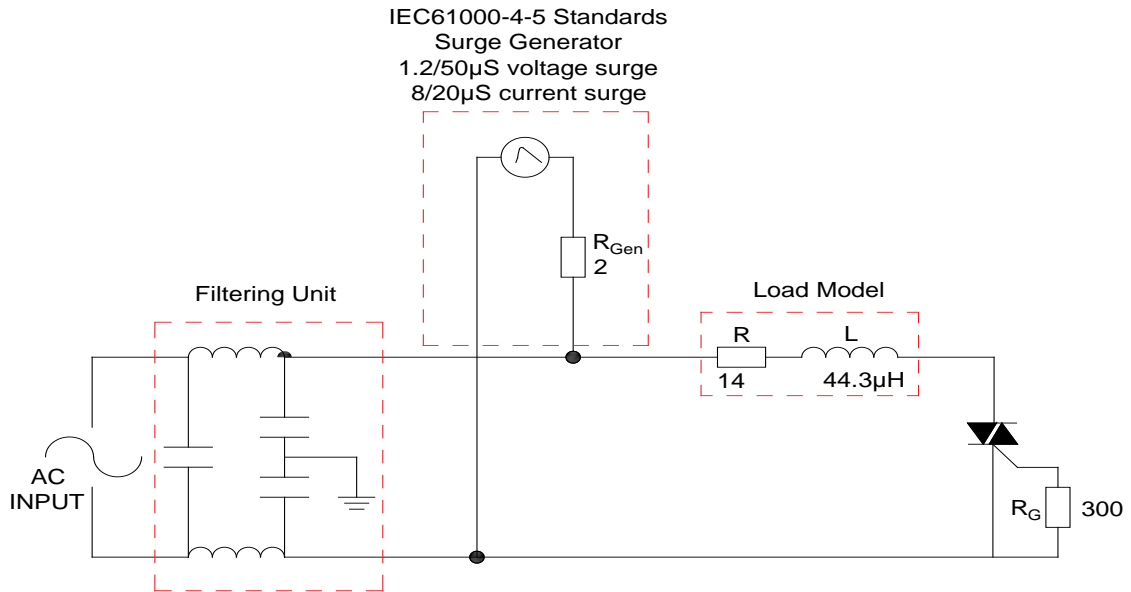


FIG.2: RMS on-state current versus case temperature



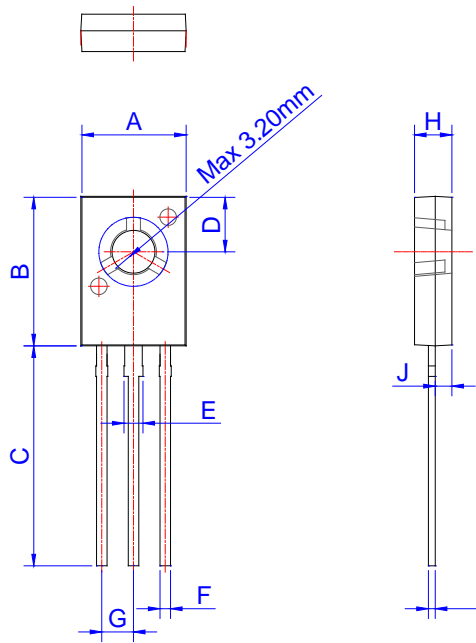
FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



| Order code | Voltage V_{DRM}/V_{RRM} (V) | IGT(mA) | | Package | Base qty. (pcs) | Delivery mode |
|--------------|----------------------------------|---------|----|---------|--------------------|------------------|
| | | - | - | | | |
| JST136Q-800E | 800 | 10 | 25 | TO-126 | 500 | Bulk Pack |

Document Revision History

| Date | Revision | Changes |
|--------------|----------|--------------|
| Apr.14, 2023 | A.1.0 | Last updated |



| 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 | 2.15 | | 2.45 | 0.085 | | 0.096 |
| 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 | OUTLINE | BAG (PCS) | INNER BOX (PCS) | CARTON BOX (PCS) |
|---------|-----------|-----------|-----------------|------------------|
| TO-126 | Bulk Pack | 500 | 2,000 | 10,000 |

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