TO-252

Triac in a TO-252 Plastic Package.

Medium current triac, Low on state voltage drop,High reliability andw on stTwa.1(o)1 resi on st

| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Repetitive peak off-state/reverse voltages($T_j$=25 ) | $V_{DRM}/V_{RRM}$ | 800 | V |
| RMS on-state current($T_C$=110 ) | $I_{T(RMS)}$ | 8 | A |
| Non repetitive surge peak on-state current(full cycle, $T_j$=25°C) | $I_{TSM(t=20ms)}$ | 65 | A |
| $I^2t$ value for fusing($T_j$=25 ) | $I^2t_{(tp=10ms)}$ | 21 | $A^2s$ |
| Critical rate of rise of on-state current ($I_G$ =2$I_{GT}$, f=120Hz $T_j$=150 ) | dI/dt I-II-III | 80 | A/εs |
| | dI/dt IV | 40 | |
| Peak gate current($t_p$ =20εs $T_j$=150 ) | $I_{GM}$ | 2.0 | A |
| Average gate power dissipation($T_j$=150 ) | $P_{G(AV)}$ | 0.5 | W |
| Operating junction temperature range | $T_j$ | -40 125 | |
| Storage junction temperature range | $T_{stg}$ | -40 150 | |
| Junction to ambient(AC) | $R_{th(j-a)}$ | 130 | /W |
| Junction to case for(AC) | $R_{th(j-c)}$ | 5 | |

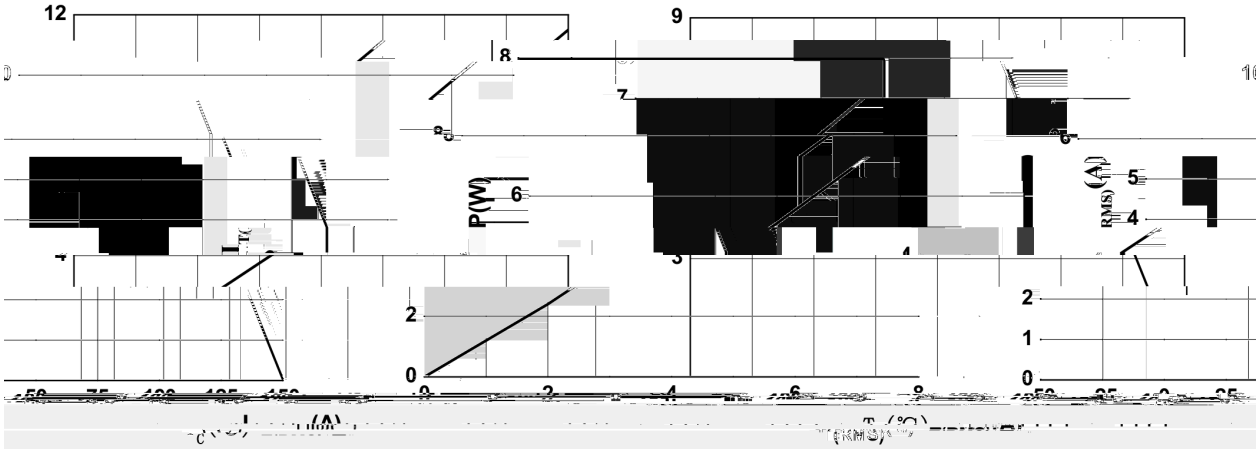

FIG.2: RMS on-state current versus case temperature

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

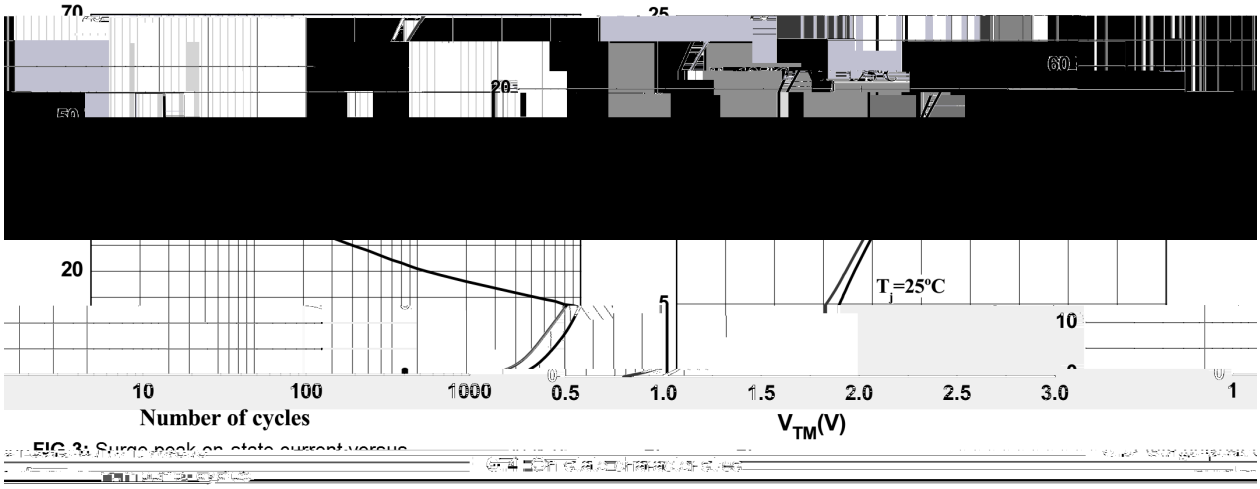


FIG.3: Surge peak on-state current versus

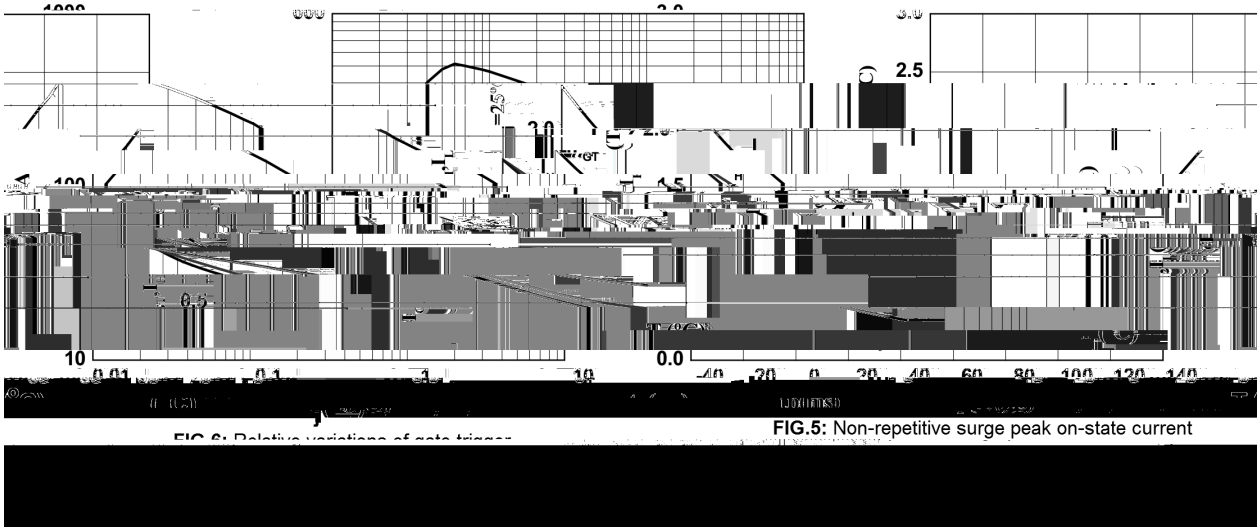

FIG.5: Non-repetitive surge peak on-state current

FIG.6: Relative variations of gate trigger

Rev.A Sep.-2024

BR

BT0808

E $I_{GT}$

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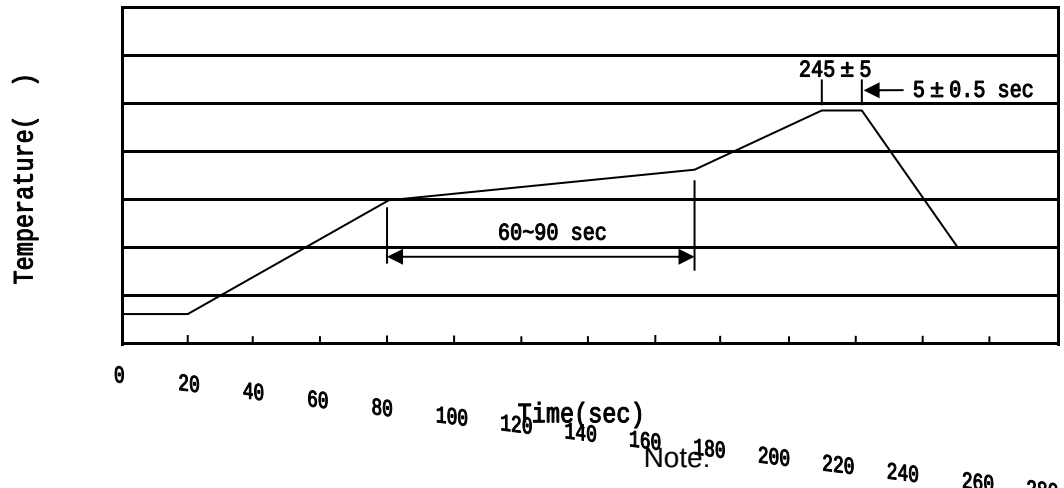
Note:

Company Code

BT0808: Product Type Code

E: I0085.9974 0 0 6 213.78 191.7203 Tm-.0075 Tc(GT)Tj10.4958 0 0 10.5 222.12 192.20
E ****

## Temperature Profile for IR Reflow Soldering(Pb-Free)




Note:

| | | | | | |
|---|---|---|---|---|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245±5 | | | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ REEL

| Package Type | Units | | | | | Dimension | | (unit mm³) |
|---|---|---|---|---|---|---|---|---|
| | Units/Reel / | Reels/Inner Box / | Units/Inner Box / | Inner Boxes/Outer Box / | Units/Outer Box / | Reel | Inner Box | Outer Box |
| TO-252 | 2,500 | 2 | 5,000 | 6 | 30,000 | 13 ×16 | 360×360×50 | 380×335×366 |

/ TUBE

| Package Type | Units | | | | | Dimension | | (unit mm³) |
|---|---|---|---|---|---|---|---|---|
| | Units/Tube / | Tubes/Inner Box / | Units/Inner Box / | Inner Boxes/Outer Box / | Units/Outer Box / | Tube | Inner Box | Outer Box |
| TO-251/252 | 75 | 48 | 3,600 | 5 | 18,000 | 526×20.5×5.25 | 555×164×50 | 575×290×180 |