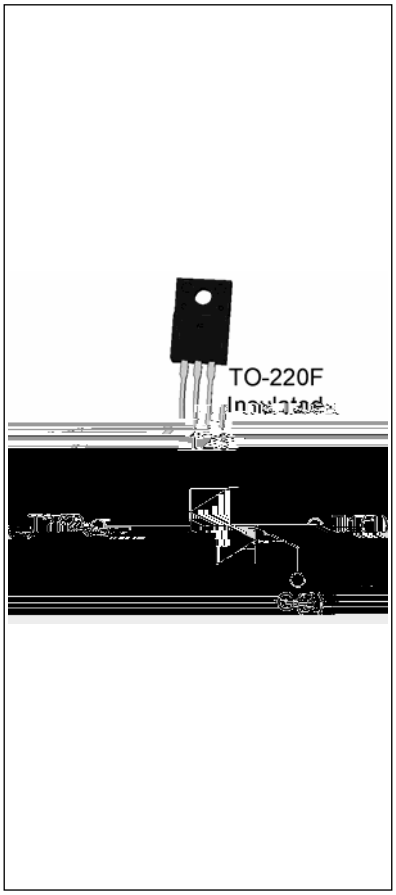
## T0810H-8F 8A TRIAC

Rev.A.1.1

### DESCRIPTION:

The T0810H-8F 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 triacs, T0810H-8F provides a very high switching capability up to junction temperatures of 150°C. It can be driven directly through the MCU I/O port. By using an external plastic package, T0810H-8F provides a rated insulation voltage of 2000 VRMS,complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.




### MAIN FEATURES

| Symbol | Value | Unit |
|---|---|---|
| $I_{T(RMS)}$ | 8 | A |
| $V_{DRM}/V_{RRM}$ | 800 | V |
| $I_{GT}$ / / | 10/10/10 | mA |

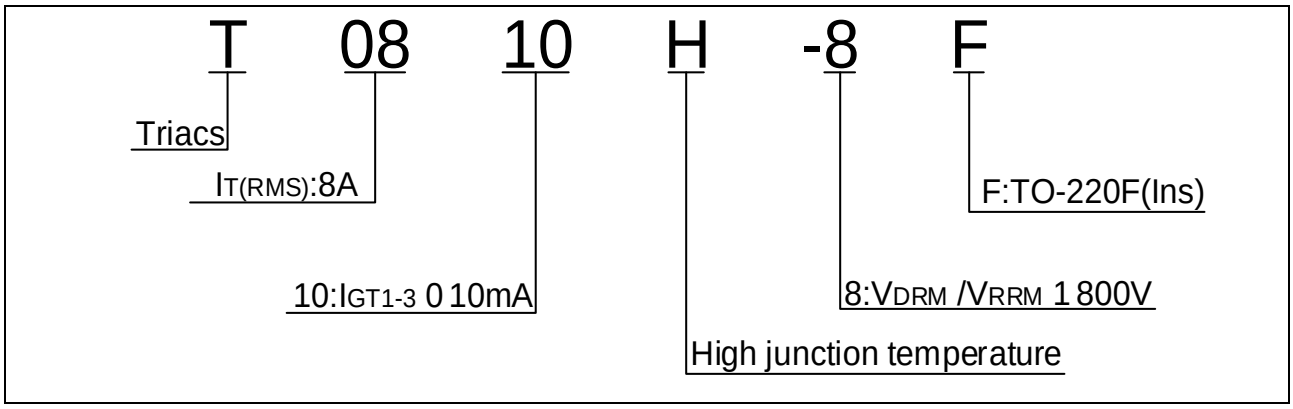
### ABSOLUTE MAXIMUM RATINGS

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Storage junction temperature range | $T_{stg}$ | -40-150 | |
| Operating junction temperature range | $T_j$ | -40-150 | |
| Repetitive peak off-state voltage ($T_j$=25 ) | $V_{DRM}$ | 800 | V |
| Repetitive peak reverse voltage ($T_j$=25 ) | $V_{RRM}$ | 800 | V |
| RMS on-state current ($T_C$ 0113 ) | $I_{T(RMS)}$ | 8 | A |
| Non repetitive surge peak on-state current (full cycle , $t_p$=20ms , $T_j$=25 ) | $I_{TSM}$ | 80 | A |
| Non repetitive surge peak on-state current (full cycle , $t_p$=16.6ms , $T_j$=25 ) | | 88 | |
| $I^2t$ value for fusing ($t_p$=10ms , $T_j$=25 ) | $I^2t$ | 32 | $A^2s$ |
| Critical rate of rise of on-state current ($I_G$=2 h$I_{GT}$ , f=100Hz , $T_j$=150 ) | dI/dt | 50 | A/µs |

| | | | |
|---|---|---|---|
| Peak gate current ($t_p$=20μs , $T_j$=150 ) | $I_{GM}$ | 4 | A |

$P_{G(AV)}$ ₽2F ^ ' 'O ز_

## ORDERING INFORMATION




## MARKING

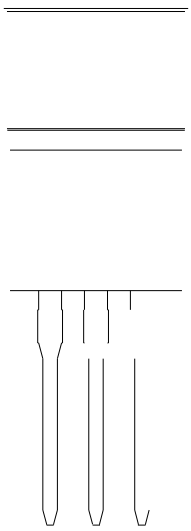


**FIG.1:** Maximum power dissipation versus RMS on-state current

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

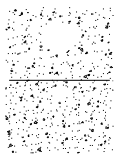
FIG.7 ÖTest circuit for inductive and resistive loads to IEC-61000-4-5 standards



## ORDERING INFORMATION

| Order code | Voltage $V_{DRM}/V_{RRM}$ (V) | IGT(mA) | Package | Base qty. (pcs) |
|---|---|---|---|---|

## PACKAGE MECHANICAL DATA



Information furnished in this document is believed to be accura