# TIGER ELECTRONIC CO.,LTD

Product specification

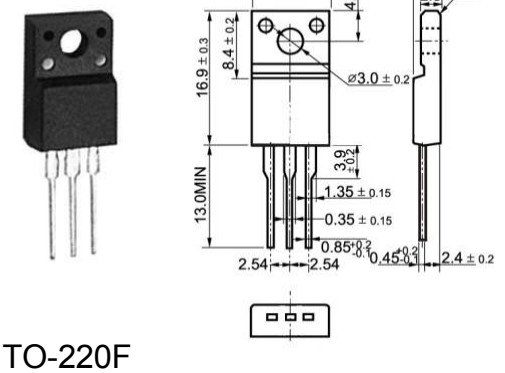
## Triacs sensitive gate — BT137X-600F

### GENERAL DESCRIPTION

Passivated, sensitive gate triacs in a plastic envelope, intended for use in general purpose bidirectional switching and phase control applications, where high sensitivity is required in all four quadrants.

### ABSOLUTE MAXIMUM RATINGS ( Ta = 25℃ )

| Parameter | Symbol | Typ | Unit |
|---|---|---|---|
| Repetitive peak off-state voltages | $V_{DRM}$ $V_{RRM}$ | 600 | V |
| RMS on-state current | $I_{T(RMS)}$ | 8.0 | A |
| Non-repetitive peak on-state current | $I_{TSM}$ | 65 | A |
| Max. Operating Junction Temperature | $T_j$ | 110 | ℃ |
| Storage Temperature | $T_{stg}$ | -45~150 | ℃ |




TO-220F

### ELECTRICAL CHARACTERISTICS ( Ta = 25℃ )

| Parameter | | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|---|
| Repetitive peak off-state voltages | | $V_{DRM}$ $V_{RRM}$ | | — | 600 | — | V |
| RMS on-state current | | $I_{T(RMS)}$ | full sine wave; $T_{mb}$ ≤107 ℃ | — | 8 | — | A |
| On-state voltage | | $V_T$ | $I_T$=10A | — | 1.3 | 1.65 | V |
| Holding current | | $I_H$ | $V_D$ = 12 V; $I_{GT}$ = 0.1 A | — | 2.2 | 15 | mA |
| Gate trigger current | T2+G+ | $I_{GT}$ | $V_D$ = 12 V; $I_T$ = 0.1 A | — | 5.0 | 25 | mA |
| | T2+G- | | | — | 8.0 | 25 | |
| | T2-G- | | | — | 11 | 25 | |
| | T2-G+ | | | — | 30 | 70 | |
| Latching current | T2+G+ | $I_L$ | $V_D$ = 12 V; $I_{GT}$ = 0.1 A | — | 7.0 | 30 | mA |
| | T2+G- | | | — | 16 | 45 | |
| | T2-G- | | | — | 5.0 | 30 | |
| | T2-G+ | | | — | 7.0 | 45 | |
| Gate trigger voltage | | $V_{GT}$ | $V_D$ = 12 V; $I_T$ = 0.1 A | — | 0.7 | 1.5 | V |