



## Triacs sensitive gate

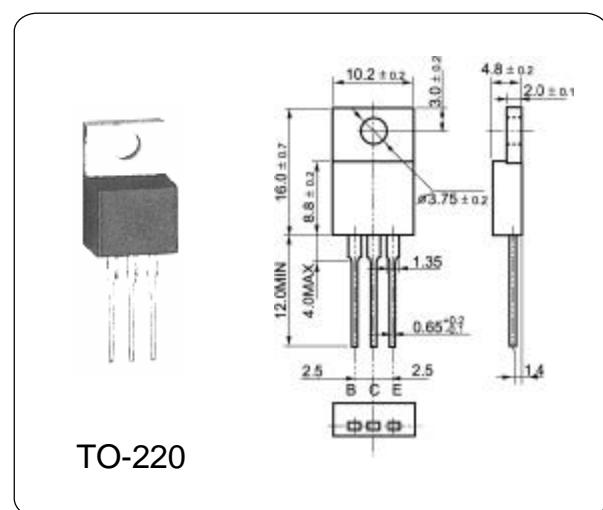
BT137-600G

## 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 °C)

| Parameter                            | Symbol                 | Typ     | Unit |
|--------------------------------------|------------------------|---------|------|
| Repetitive peak off-state voltages   | $V_{DRM}$<br>$V_{RRM}$ | 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     | °C   |
| Storage Temperature                  | $T_{stg}$              | -45~150 | °C   |



## ELECTRICAL CHARACTERISTICS ( Ta = 25 °C)

| Parameter                          | Symbol                 | Test Conditions                          | Min | Typ | Max  | Unit |
|------------------------------------|------------------------|--|-----|-----|------|------|
| Repetitive peak off-state voltages | $V_{DRM}$<br>$V_{RRM}$ |  | —   | 600 | —    | V    |
| RMS on-state current               | $I_{T(RMS)}$           | full sine wave; $T_{mb} \leq 107$ °C     | —   | 8   | —    | A    |
| On-state voltage                   | $V_T$                  | $I_T = 10A$                              | —   | 1.3 | 1.65 | V    |
| Holding current                    | $I_H$                  | $V_D = 12 V$ ; $I_{GT} = 0.1 A$          | —   | 5   | 20   | mA   |
| Gate trigger current               | T2+G+                  | $I_{GT}$<br>$V_D = 12 V$ ; $I_T = 0.1 A$ | —   | 2   | 50   | mA   |
|                                    | T2+G-                  |  | —   | 8   | 50   |      |
|                                    | T2-G-                  |  | —   | 11  | 50   |      |
|                                    | T2-G+                  |  | —   | 30  | 100  |      |
| Latching current                   | T2+G+                  | $I_L$<br>$V_D = 12 V$ ; $I_{GT} = 0.1 A$ | —   | 7   | 45   | mA   |
|                                    | T2+G-                  |  | —   | 16  | 60   |      |
|                                    | T2-G-                  |  | —   | 5   | 45   |      |
|                                    | T2-G+                  |  | —   | 7   | 60   |      |
| Gate trigger voltage               | $V_{GT}$               | $V_D = 12 V$ ; $I_T = 0.1 A$             | —   | —   | 1.5  | V    |