



40A TRIACS

BTA/BTB41-600B

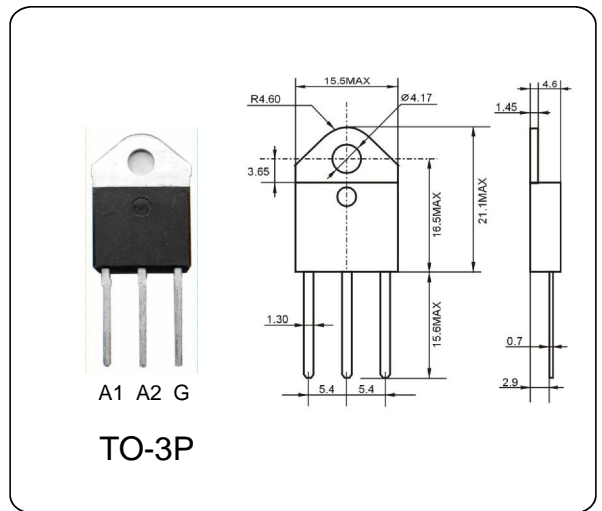
GENERAL DESCRIPTION

Available either in through-hole or surface-mount packages, the BTA/BTB41 - 600B triac series is suitable for general purpose AC switching. They can be used as an ON/OFF function in applications such as static relays, heating regulation, induction motor starting circuits... or for phase control operation in light dimmers, motor speed controllers, ...

The snubberless versions (BTA/BTB...W series) are specially recommended for use on inductive loads, thanks to their high commutation performances. By using an internal ceramic pad, the BTA series provides voltage insulated tab (rated at 2500V RMS) complying with UL standards.

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

| PARAMETER | Symbol | Value | Unit |
|--------------------------------------|-----------|---------|------|
| Repetitive peak off-state voltages | V_{DRM} | 600 | V |
| peak off-state reverse voltages | V_{RRM} | 600 | V |
| RMS on-state current | I_T | 40.0 | A |
| Non-repetitive peak on-state current | I_{TSM} | 420 | 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. | Max | Unit |
|------------------------------------|-----------|---------------------------|------|------|------|
| Repetitive peak off-state voltages | V_{DRM} | $I_D=0.1mA$ | 600 | | V |
| Repetitive peak off-state current | I_{DRM} | $V_{DRM}=520V$ | | 10 | uA |
| On-state voltage | V_{TM} | $I_T=60A$ | | 1.55 | V |
| Holding current | I_H | $I_T=0.5A, I_{GT}=50mA$ | | 80 | mA |
| Gate trigger Current | T2+G+ | $V_{AK}=12V \quad R_L=30$ | | 50 | mA |
| | T2+G- | | | 50 | |
| | T2-G- | | | 50 | |
| | T2-G+ | | | 100 | |
| Gate trigger Voltage | T2+G+ | $V_D=12V \quad R_L=30$ | | 1.3 | V |
| | T2+G- | | | 1.3 | |
| | T2-G- | | | 1.3 | |
| | T2-G+ | | | 1.3 | |