

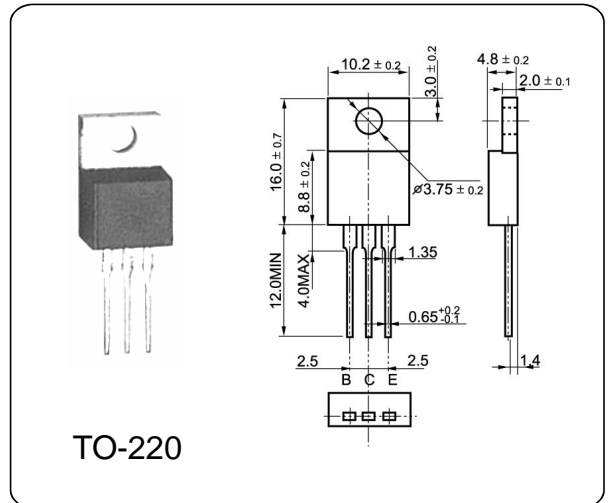


GENERAL DESCRIPTION

Passivated thyristors in a plastic envelope, intended for use in applications requiring high bidirectional blocking voltage capability and high thermal cycling performance. Typical applications include motor control, industrial domestic lighting, heating and static and switching.

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

| Parameter | Symbol | Typ | Unit |
|--------------------------------------|------------------------|---------|------|
| Repetitive peak off-state voltages | V_{DRM} V_{RRM} | 500 | V |
| RMS on-state current | $I_{T(RMS)}$ | 12 | A |
| Non-repetitive peak on-state current | I_{TSM} | 100 | 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} V_{RRM} | | | 500 | | V |
| RMS on-state current | $I_{T(RMS)}$ | full sine wave; T_{mb} 107 °C | | 12 | | A |
| On-state voltage | V_T | $I_T=23A$ | | 1.4 | 1.75 | V |
| Holding current | I_H | $V_D = 12 V$; $I_{GT} = 0.1 A$ | | 7 | 20 | mA |
| Gate trigger current | I_{GT} | $V_D = 12 V$; $I_T = 0.1 A$ | | 2 | 15 | mA |
| Latching current | I_L | $V_D = 12 V$; $I_{GT} = 0.1 A$ | | 10 | 40 | mA |
| Gate trigger voltage | V_{GT} | $V_D = 12 V$; $I_T = 0.1 A$ | | 0.6 | 1.5 | V |