

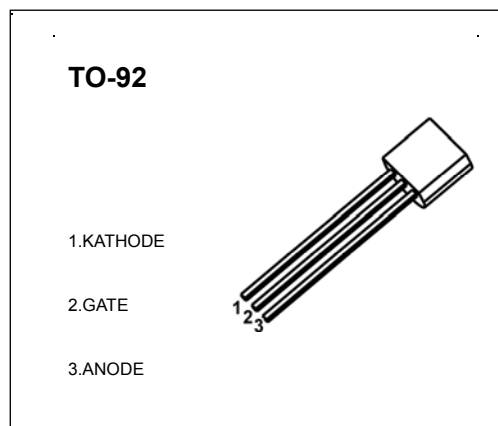


TO-92 Plastic-Encapsulate Thyristors

MCR 100- 6,- 8 Silicon Planar PNP Thyristor

MAIN FEATURES

| Symbol | value | unit |
|--------------|----------------------|--------------|
| $I_{T(RMS)}$ | 0.8 | A |
| V_{DRM} | MCR100-6 | 400 |
| | MCR100-8 | 600 |
| T_j | Junction Temperature | -40 ~ 125 °C |
| T_{stg} | Storage Temperature | -55 ~ 150 °C |



DESCRIPTION

Logic level sensitive gate triac intended to be interfaced directly to microcontrollers, logic integrated circuits and other low power gate trigger circuits.

FEATURES

- Blocking voltage to 400 V (MCR100-6)
- RMS on-state current to 0.8 A
- General purpose switching

APPLICATIONS

- General purpose switching
- Phase control applications
- Solid state relays

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Max | Unit | |
|--|------------------------|--|-----|-----|---------|---------|
| On state voltage * | V_{TM} | $I_{TM}=1A$ | | 1.7 | V | |
| Gate trigger voltage | V_{GT} | $V_{AK}=7V$ | | 0.8 | V | |
| Peak Repetitive forward blocking voltage | V_{DRM} | $I_{DRM}= 10 \mu A$ | 400 | | V | |
| MCR100-6 MCR100-8 | | | 600 | | | |
| Peak forward or reverse blocking Current | I_{DRM} I_{RRM} | $V_{AK}= \text{Rated}$ V_{DRM} or V_{RRM} | | 10 | μA | |
| Holding current | I_H | $I_{HL}=20mA, V_{AK}=7V$ | | 5 | mA | |
| Gate trigger current | I_{GT} | $V_{AK}=7V$ | A2 | 5 | 15 | μA |
| | | | A1 | 15 | 30 | μA |
| | | | A | 30 | 80 | μA |
| | | | B | 80 | 200 | μA |

* Forward current applied for 1 ms maximum duration, duty cycle ≤ 1%.