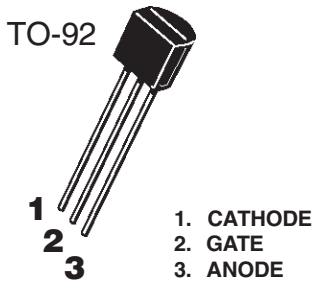
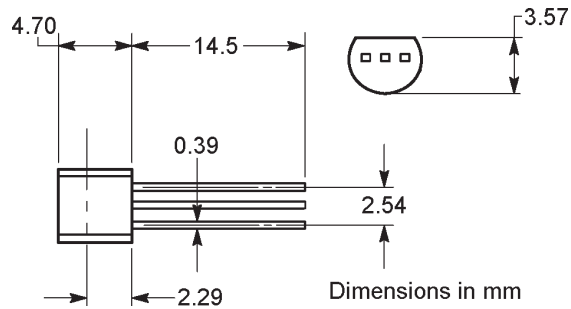


FCR100-6

Description



Mechanical Dimensions



Feature:

- Driven directly with IC and MOS device.
- Feature proprietary, void-free glass passivate chips.
- Available in voltage ratings from 200 to 600 volts. (VDRM and VRRM)
- Sensitive gate trigger current.
- Designed for high volume, line-powered control application in relay lamp drivers, small motor controls, gate drivers for large thyristors.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (Ta=25°C)

| PARAMETERS | SYMBOL | DEVICE NUMBER | V | UNITS |
|---|--------------------|---------------|--------------|----------------|
| Repetitive Peak Off-State Voltage and Repetitive Peak Reverse Voltage (1) | VDRM & VRRM | FCR100-6 | 400 | VOLT |
| RMS On-State Current at Ta=57°C and Conduction Angle of 180° | IT(RMS) | | 0.8 | AMP |
| Peak Surge (Non-Repetitive) On-State Current, ½ Cycle, at 50Hz or 60Hz | ITSM | | 8 | AMP |
| Peak Gate-Trigger Current for 3µ sec, Max | IGTM | | 0.8 | AMP |
| Peak Gate-Power Dissipation at IGT ≤ IGTM | P _{GM} | | 0.1 | WATT |
| Average Gate-Power Dissipation | P _{G(AV)} | | 0.01 | WATT |
| Peak gate reverse voltage | V _{RGM} | | 6 | V |
| Peak Off-State Current, (1) Ta=25°C VDRM & VRRM=Max. Rating Ta=125°C | IDRM & IRRM | | 10 200 | µA MAX |
| Maximum On-State Voltage. (Peak) At Tc=25°C and IT =Rated Amps | V _{TM} | | 1.7 | VOLT MAX |
| DC Holding Current,(1) | I _{HO} | | 5 | mA MAX |
| Critical Rate-Of-Rise of off-State Voltage.(1) Gate Open, Ta=110°C | Critical dv/dt | | 5 | V/µ sec |
| DC Gate –Trigger Current for Anode Voltage=7VDC, RL=100Ω | IGT | | 200 | µA MAX |
| DC Gate –Trigger Voltage for Anode Voltage=7VDC, RL=100Ω | V _{GT} | | 0.8 | VOLT MAX |
| Gate-Controlled Turn-on Time tD+tR IGT=10mA | Tgt | | 2.2 | µ sec |
| Thermal Resistance, Junction-to-Case | Rθ J-C | | 75 | °C/WATT TYP |
| Storage Temperature range | Tstg | | -40 to + 150 | °C |
| Operating Temperature Range, Tj | Toper | | -40 to + 110 | °C |

(1)RGK=1KΩ



0.8 Amp Silicon Controlled Rectifiers

