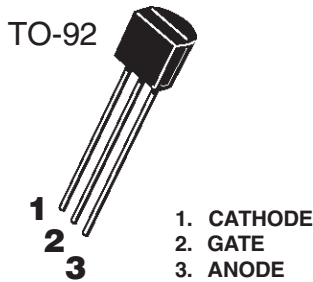
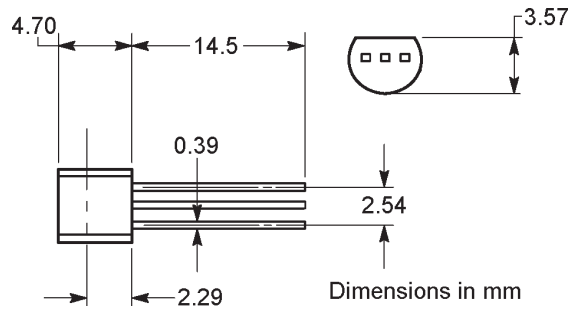


**FCR150-8**

## 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	FCR150-8	600	VOLT
RMS On-State Current at Ta=57°C and Conduction Angle of 180°	IT(RMS)		1.5	AMP
Peak Surge (Non-Repetitive) On-State Current, ½ Cycle, at 50Hz or 60Hz	ITSM		15	AMP
Peak Gate-Trigger Current for 3μ sec, Max	IGTM		1.0	AMP
Peak Gate-Power Dissipation at IGT ≤ IGTM	P <sub>GM</sub>		0.1	WATT
Average Gate-Power Dissipation	P <sub>G(AV)</sub>		0.01	WATT
Peak gate reverse voltage	V <sub>RGM</sub>		6	V
Peak Off-State Current, (1) Ta=25°C VDRM & VRRM=Max. Rating Ta=125°C	IDRM & IRRM		10 100	μA MAX
Maximum On-State Voltage. (Peak) At Tc=25°C and IT =Rated Amps	V <sub>TM</sub>		1.7	VOLT MAX
DC Holding Current, (1)	I <sub>HO</sub>		5	mA MAX
Critical Rate-Of-Rise of off-State Voltage. (1) Gate Open, Ta=110°C	Critical dv/dt		35	V/μ sec
DC Gate –Trigger Current for Anode Voltage=7VDC, RL=100Ω	IGT		100	μA MAX
DC Gate –Trigger Voltage for Anode Voltage=7VDC, RL=100Ω	V <sub>GT</sub>		0.8	VOLT MAX
Gate-Controlled Turn-on Time tD+tR IGT=10mA	Tgt		2.2	μ sec
Thermal Resistance, Junction-to-Case	R θ 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

