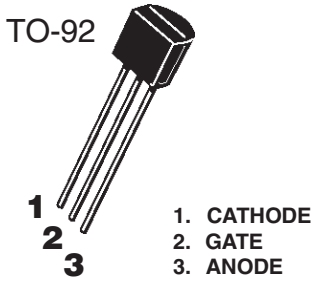
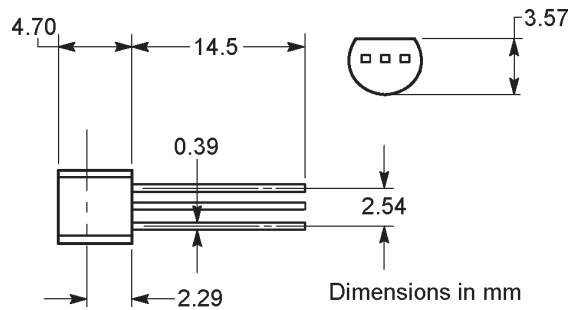


FCR0840~60

Description



Mechanical Dimensions



- Driven directly with IC and MOS device.
- Feature proprietary, void-free glass passivate chips.
- Available in voltage ratings from 400 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	RATING	UNITS
Repetitive Peak Off-State Voltage and Repetitive Peak Reverse Voltage	* V _{DRM} * V _{RRM}	FCR0840 FCR0860	400 600	VOLT
RMS On-State Current at Ta=57°C and Conduction Angle of 180°	I _T (RMS)		0.8	AMP
Peak Surge (Non-Repetitive) On-State Current, ½ Cycle, at 50Hz or 60Hz	I _{TSM}		8	AMP
Peak Gate-Trigger Current for 3µ sec, Max	I _{GT}		0.8	AMP
Peak Gate-Power Dissipation at I _{GT} ≤ I _{GT}	P _{GM}		0.1	WATT
Average Gate-Power Dissipation	P _{G(AV)}		0.01	WATT
Peak gate reverse voltage	V _{RGM}		10	V
Peak Off-State Current, Ta=25°C (1) VDRM & VRRM=Max. Rating Ta=125°C (2)	* I _{DRM} * I _{RRM}		(1) 10 (2) 100	µA MAX
Maximum On-State Voltage. (Peak) At Tc=25°C and I _T =Rated Amps	V _{TM}		1.7	VOLT MAX
DC Holding Current	* I _H		5	mA MAX
Critical Rate-Of-Rise of off-State Voltage Gate Open, Ta=110°C	* Critical dv/dt		5	V/µ sec
DC Gate -Trigger Current for Anode Voltage=7VDC, RL=100Ω	I _{GT}		100	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

* RGK=1KΩ

