

FEATURES

- Driven directly with IC and MOS device.
- Feature proprietary, void-free glass passivated 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.

motor controls, gate drivers for large thyristors. MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (Ta= 25° C)

PARAMETERS	SYMBOL		V	UNITS
Repetitive Peak Off-State Voltage and Repetitive Peak Reverse Voltage (1)	VDRM & VRRM	PA10SD	400	VOLT
RMS On-State Current at Ta=57°C and Conduction Angle of 180°	I _T (RMS)	1.0		AMP
Peak Surge (Non-Repetitive)On-State Current, ¹ / ₂ Cycle ,at 50Hz or 60Hz	I _{TSM}	8		AMP
Peak Gate-Trigger Current for 3µ sec, Max	I _{GTM}	1.0		AMP
Peak Gate-Power Dissipation at IGT \leq 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	I _{drm} & I _{rrm}	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)	$I_{\rm HO}$	10		mA MAX
Critical Rate-Of-Rise of off-State Voltage.(1) Gate Open,Ta=110℃	Critical dv/dt	5		V/µ sec
DC Gate –Trigger Current for Anode Voltage=7VDC, RL=100 Ω	I _{GT}	200		μA MAX
DC Gate –Trigger Voltage for Anode Voltage=7VDC, RL=100 Ω	V _{GT}	0.8		VOLT MAX
Gate-Controlled Turn-on Time tD+tR IGT=10mA	Tgt	2.2		µ sec
Thermal Resistance, Junction-to-Ambient	$R \theta J-A$	70		°C/WATT TYP
Storage Temperature range	Tstg	-40 to + 2	150	°C
Operating Temperature Range, Tj	Toper	-40 to + 2	110	°C



1.0 Amp Silicon Controlled Rectifiers

(Typical,Ta=25°C)

10°

120

120

160

(Typical)

R_{gk} = 1kΩ R_L = 100Ω 160

(Typical)

V_{AK} = 7V R₁ = 100Ω

10'

