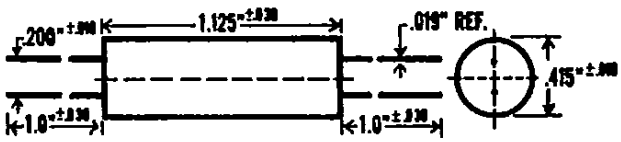
Photomods®
Six Volt Modules

CLM3006A
CLM4006A

- Six Volt, 40 Ma Lamp
- Low Impedance, Long Life
- Isolation Voltage 2500V PAC
- No Moving Parts

CLM3006A and CLM4006A



APPLICATIONS

CLM3006A — This module is designed for applications where appropriate lamp power is available. It features very fast cell response to lamp turn-on and an extremely large resistance span between R_{ON} and R_{OFF}.

Applications include multiplex (commutation) and other switching, closed-loop gain or level controls, and remote or telemetered (isolated) indicators.

CLM4006A — This is a moderate speed switching module for use in very low impedance circuitry. It is used in industrial interface applications where the low resistances attainable provide improved immunity to 'pick up' and transients.

TECHNICAL DATA

MODULE PART NUMBER	CONTROL LAMP LIFE — 5000 HOURS			CONTROL LAMP LIFE — 50,000 HOURS			③ MAXIMUM RISE TIME t_R SECONDS	④ MAXIMUM DECAY TIME t_D SECONDS	⑤ MINIMUM OFF RESISTANCE 10 SECONDS AFTER LAMP TURN-OFF R_D— MEGOHMS
	Rated Lamp Voltage and Current		Output ① Resistance @ Rated Voltage R_C — Ohms Maximum	Lamp Voltage V_L VOLTS	Output ② Resistance @V_L R_{CL}— OHMS				
	V_R VOLTS	I_R * MILLIAMPS			Minimum	Maximum			
CLM3006A	6	40	160	5	—	210	.060	.170	10
CLM4006A	6	40	55	5	18	54	.080	.170	1

*Varies from 35Ma to 45Ma

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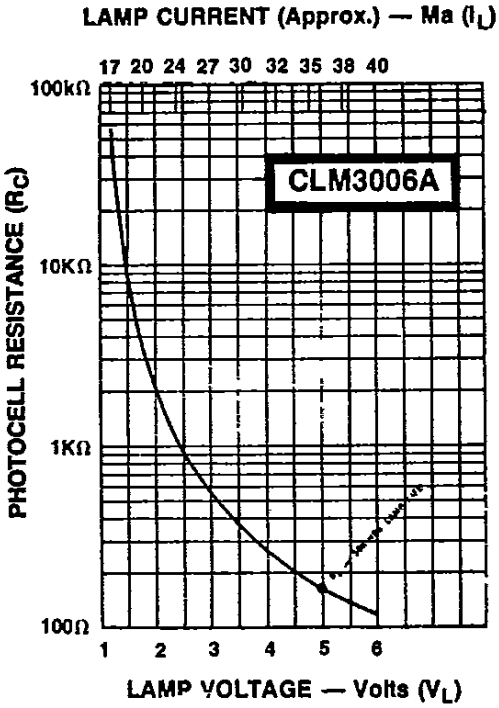
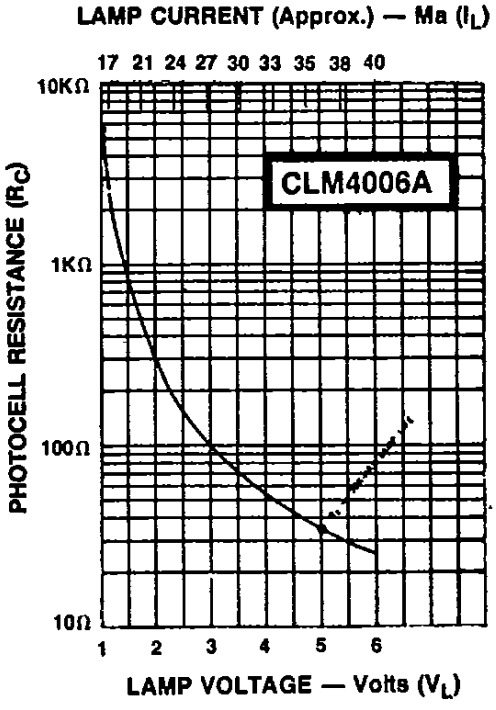
PHOTOCELL RESISTANCE-R_C VS LAMP VOLTAGE-V_L & LAMP CURRENT I_L ①





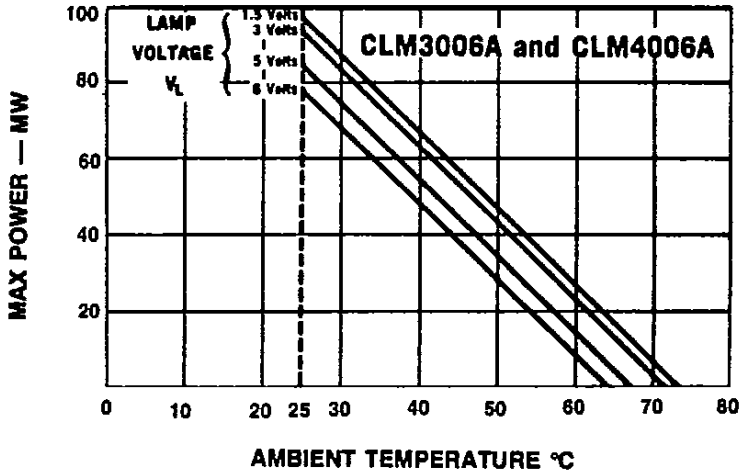
TEMPERATURE AND POWER

Allowable Photomod® power dissipation is a function of the photocell temperature. The following curves exhibit the allowable photocell power dissipation as a function of ambient temperature and lamp voltage.

MAXIMUM RATINGS

PHOTOCELL TEMPERATURE −25°C TO +75°C
CELL SHUNT CAPACITANCE . 5 PICOFARADS
VOLTAGE ACROSS CELL ... 200V — PEAK AC
VOLTAGE ISOLATION ..... 2500V PEAK AC

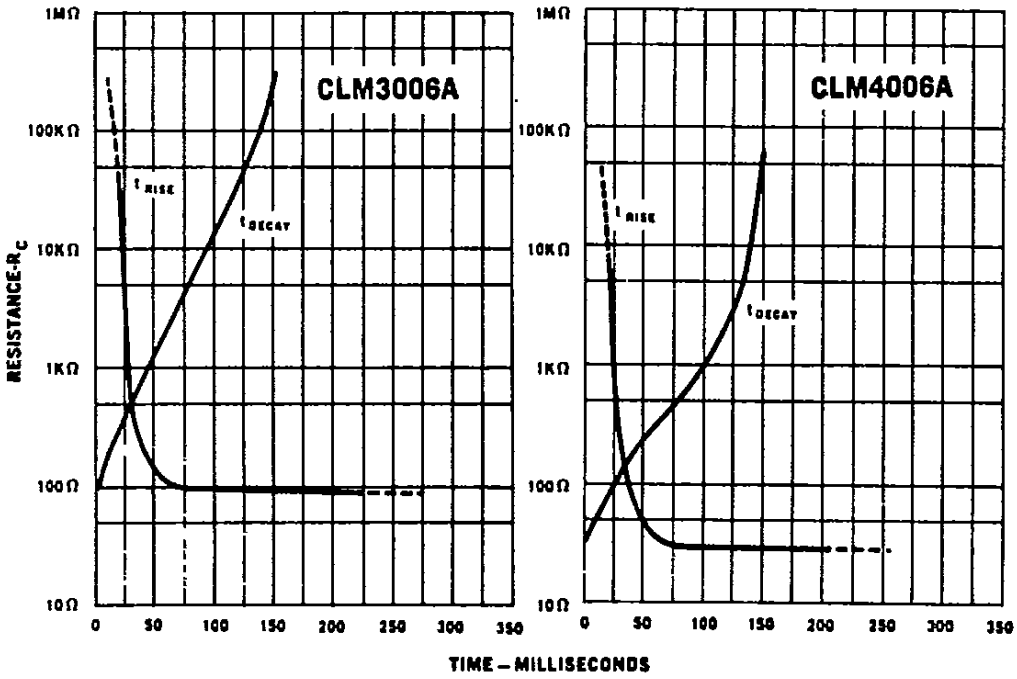
PHOTOCELL POWER DISSIPATION



RESPONSE TIME

The t_{RISE} and t_{DECAY} curve is the response time of the module when the lamp voltage is instantaneously varied from either zero to rated lamp voltage (t_{RISE}) or rated lamp voltage to zero (t_{DECAY}).

These curves are representative characteristics. For specific speed specifications, please contact the factory.



NOTES ON DATA

❶ Maximum **ON** resistance measured after 24 hours with lamp **ON** at rated voltage (V_R) and current (I_R).

❷ **ON** resistance measured after module has had no lamp power applied for a minimum of 96 hours. Measurement made within one minute after lamp power is applied.

❸ Maximum rise time (t_R) is the time from application of lamp voltage (V_L) until $R_{CL} \leqq 5\ R_{CL}$ (MINIMUM). [For CLM3006A $R_{CL} \leqq 5\ R_{CL}$ (MAXIMUM)]

❹ Maximum decay time (t_D) is the time from lamp turn off until $R_{CL} \geqq 30\ R_{CL}$ (MINIMUM). [For CLM3006A $R_{CL} \geqq 30\ R_{CL}$ (MAXIMUM)]

❺ **OFF** resistance measured with 30 volts DC applied across photocell.

❻ Cell data presented in these curves is typical. For specific values at lamp voltages other than tabulated and for tolerances which can be expected in production, contact the factory.