

T-41-81

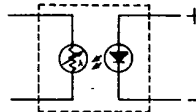
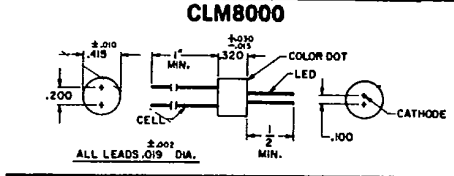
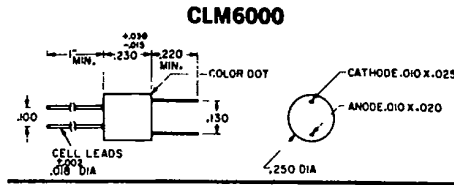
**CLM6000
CLM8000**

**LED-
Photoconductor
Isolators**

This PHOTOMOD® Series combines solid state lamps with Clairex® photoconductive cells in small, rugged axial-lead isolators.

CLM6000 — Miniature, low power, low resistance, noiseless switching. Interfaces TTL to TTL providing complete isolation.

CLM8000 — High-reliability, hermetically-sealed cell and LED. Will operate on line voltage to drive SCR and Triacs from TTL output.



TECHNICAL DATA

LED	CHARACTERISTICS	TEST CONDITIONS	CLM6000			CLM8000			UNITS
			Min.	Typ.	Max.	Min.	Typ.	Max.	
I _F max.	Maximum forward current				40		50	mA	
V _F	Forward voltage	I _F = 20 mA			2.0		2.5	volts	
I _R	Reverse current	V _R = 4V			100		3	μA	
PHOTOCELL V _{MAX}	Cell voltage				60		220	volts DC or PAC	
P ①	Power dissipation	25°C			50		125	milliwatts	
PHOTOMOD R _{ON} ②	On resistance	I _F = 20 mA I _F = 40 mA			500		400	ohms ohms	
R _{OFF}	Off resistance	10 sec. after I _F → 0 4 VDC on cell	500K			500K		ohms	
t _R ③	Rise time	Time to 63% of final condition at I _F = 40		3.5		3.5		milliseconds	
t _D ④	Decay time	Time to 100K		500		500		milliseconds	
V _{BD}	Isolation		2000			2500		volts DC or PAC	
dRc/dt	Cell temperature coefficient	I _F ≥ 5 mA		1		1		%/°C	

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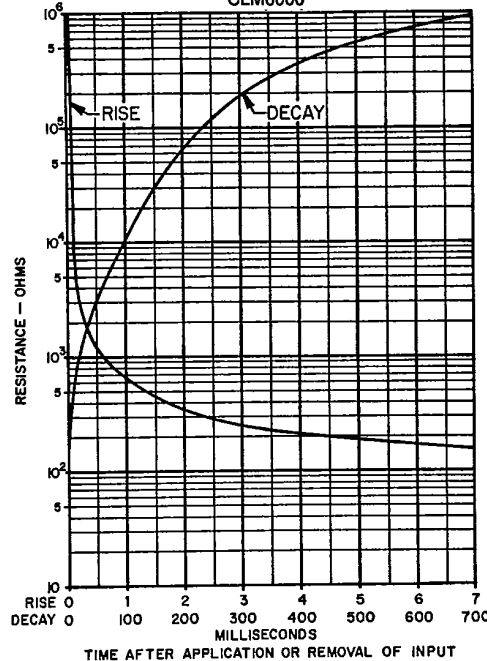
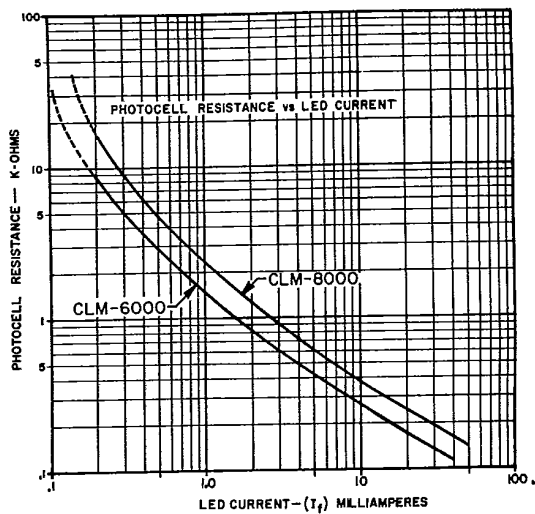
Absolute Maximum Ratings:

Temperature Storage — 10°C to 75°C

Operating — Derate power to 0 at 75°C (SEE OTHER SIDE)

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PC-LED PHOTOMOD SLOPE CHARACTERISTICS



RESPONSE TIME

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

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

Notes:

- ① P.D. at 25°C case temperature. Derate linearly to 0 at 75°C.
Allowable PHOTOMOD dissipation is determined by the photocell temperature which must not exceed 75°C for continuous operation.
- ② After 24 hours on.
- ③ Rise time measured after 24 hours on + 5 seconds off.
- ④ Decay time measured from 24 hours on.

