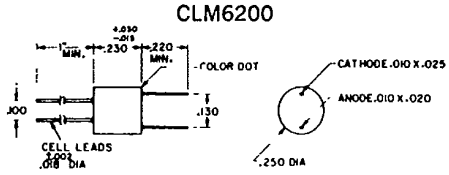
T-41-81

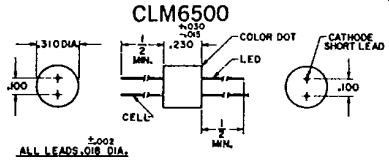
CLM6200
CLM6500

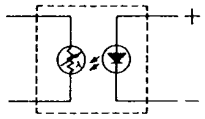
LED-Photoconductor Isolators

CLM6200



CLM6500





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

The CLM 6200 features linear output characteristics over a wide input current range and is ideally suited for analog applications.

The CLM 6500 features low output resistance levels with low input current levels. The unit is ideally suited for AGC application.

TECHNICAL DATA

LED	CHARACTERISTICS	TEST CONDITIONS	CLM6200 Min.	CLM6200 Typ.	CLM6200 Max.	CLM6500 Min.	CLM6500 Typ.	CLM6500 Max.	UNITS
I_F max.	Maximum forward current				40			40	mA
V_F	Forward voltage	I_F = 16 mA			2.0			2.5	volts
I_R	Reverse current	V_R = 4 V			100			3	μA
PHOTOCELL V_{MAX}	Cell voltage				60			100	volts DC or PAC
P ①	Power dissipation	25°C			50			50	milliwatts
PHOTOMOD R_{ON} ②	On resistance	I_F=20 mA I_F=10 mA			10 K			400	ohms onms
R_{OFF}	Off resistance	10 sec. after $I_F \rightarrow 0$ 10 VDC on cell	10 Meg			10 Meg			ohms
t_R ③	Rise time	Time to 63% of final condition at I_F 16 mA		3.5			5		milliseconds
t_D ④	Decay time	Time to 100K		12			80		milliseconds
V_{BD}	Isolation		2000			2000			volts DC or PAC
dRc/dt	Cell temperature coefficient	$I_F \geq 5$ mA		0 6			0 7		%/°C

Absolute Maximum Ratings:

Temperature Storage — 40° to 75°C **Operating — Derate power to 0 at 75°C**

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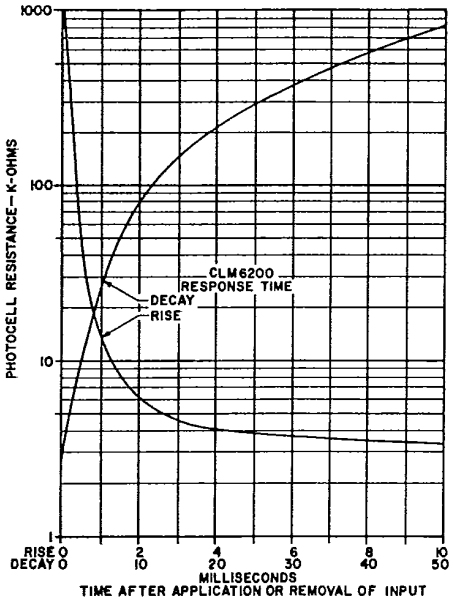
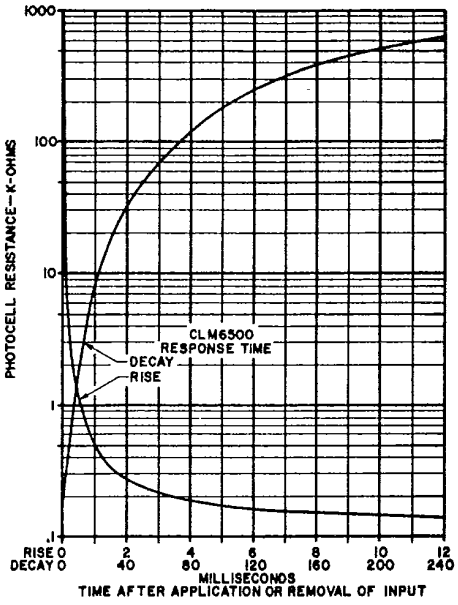
PC-LED PHOTOMOD SLOPE CHARACTERISTICS

CLM6200



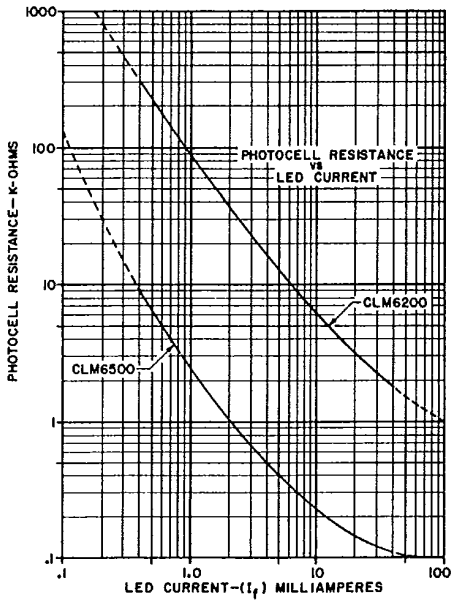
CLM6500



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.