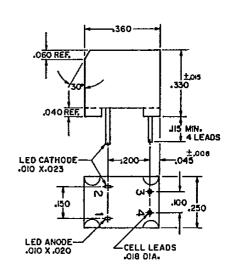
## CLM400 CLM410

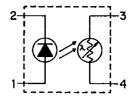
# LED. www.DataSheet4U.com

# Photoconductor Isolators

The first in the series is the CLM400, which is an exact drop-in replacement electrically for the CLM6000 PHOTOMOD. The radial lead design eliminates costly lead cutting and forming operations now needed for PCB usage.

The second in the series is the CLM410 which has very low "on" resistance of 750 ohms @ 1 ma. drive versus the CLM6000 or CLM400 with 500 ohms @ 20 ma. drive. Both of the new 400 Series devices are now specified at 1 ma. drive currents.





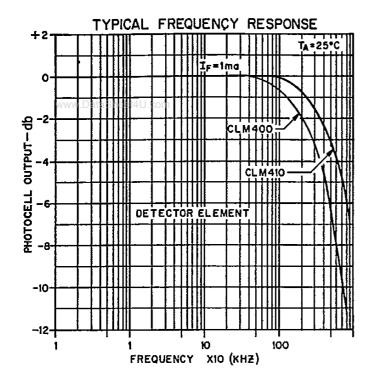
#### LECTRICAL CHARACTERISTICS @25°C ECHNICAL DATA

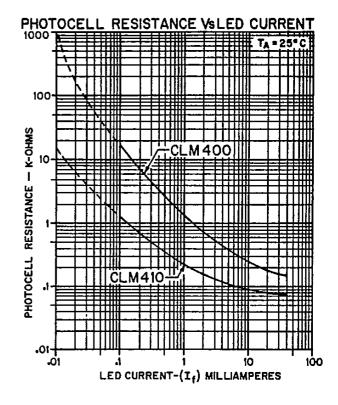
| Led                           |     | Characteristics              | Test Conditions                                       | Min. | CLM400<br>Typ. | Max.      | Min. | CLM410<br>Type. | Max. | Units           |
|-------------------------------|-----|------------------------------|---|------|----------------|-----------|------|-----------------|------|-----------------|
| I <sub>E</sub> MAX            |     | Maximum forward current      |   |      |                | 40        |      | -               | 40   | mA              |
| V <sub>F</sub>                |     | Forward voltage              | l <sub>F ≃ 20 m</sub> A                               |      |                | 2.0       |      |                 | 2.5  | voits           |
| I <sub>R</sub>                |     | Reverse current              | V <sub>R</sub> = 4V                                   |      |                | 100       |      |                 | 100  | μΑ              |
| PHOTOCELL<br>V <sub>MAX</sub> |     | Celi voltage                 |   |      |                | 60        |      |                 | 60   | volts DC or PAC |
| P                             | 0   | Power dissipation            | 25°C  |      |                | 50        |      |                 | 50   | milliwatts      |
| РНОТОМО<br>Я <sub>ОН</sub>    | D ① | On resistance                | l <sub>F</sub> = 1 mA<br>l <sub>F</sub> = 20 mA       |      |                | 5K<br>500 |      |                 | 750  | ohms<br>ohms    |
| R <sub>OFF</sub>              |     | Off resistance               | 10 sec. after I <sub>F</sub> → 0<br>4 VDC on cell     | 500K |                |           | 500K |                 |      | ohms            |
| t <sub>R</sub>                | ①   | Rise time                    | Time to 63% of final condition at I <sub>F</sub> = 40 |      | 3.5            |           |      | 3.5             |      | milliseconds    |
| t <sub>D</sub>                | 0   | Decay time                   | Time to 100K  |      |                | 500       |      |                 | 500  | milliseconds    |
| V <sub>BD</sub>               |     | Isolation                    |   | 2000 | •              |           | 2000 |                 |      | volts DC or PAC |
| dRc/dt                        |     | Cell temperature coefficient | I <sub>F</sub> = 1 mA<br>- 40 to 70°C                 |      | 3              |           |      | •2              |      | %/°C            |
| CIMOUT                        |     | Input-Output capacitance     | V=OV<br>I=1MHZ  |      | .65            |           | ·    | .65             |      | pf              |
|                               |     | <del>-</del> -               |   |      |                |           |      |                 |      |                 |

**Absolute Maximum Ratings:** 

Femperature Storage — 40°C to 75°C

Operating -- Derate power to 0 at 75°C

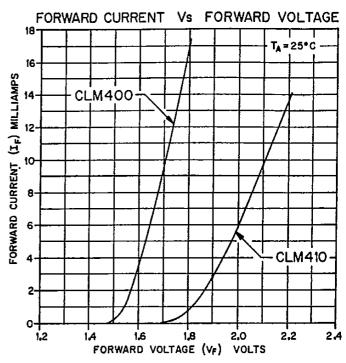




### RESPONSE TIME

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.