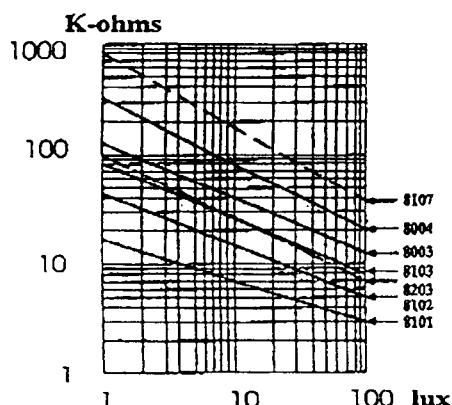


| Type No. | Out-line | Maximum Ratings               |  |                             | Characteristics E (at 25°C) |        |                     |                       |                          |    |
|----------|----------|-------------------------------|--|-----------------------------|-----------------------------|--------|---------------------|-----------------------|--------------------------|----|
|          |          | Applied Voltage at 25°C (Vdc) | Allowable Power Dissipation at 25°C (mW) | Ambient Temperature Ta (°C) | Cell Resistance A           |        |                     | C<br>100 ~ 10 lx Typ. | Response Time at 10 lx D |    |
|          |          |                               |  |                             | 10 lx (at 2856K)            | 0 lx B | Rise Time Type (ms) |                       | Decay Time Typ. (ms)     |    |
| 8001     |          | 150                           | 100                                      | -30~+75                     | 3                           | 11     | 0.2                 | 0.6                   | 50                       | 20 |
| 8002     |          | 150                           | 100                                      | -30~+75                     | 8                           | 24     | 0.5                 | 0.65                  | 50                       | 20 |
| 8003-1   |          | 150                           | 100                                      | -30~+75                     | 20                          | 30     | 0.5                 | 0.7                   | 55                       | 20 |
| 8004     |          | 150                           | 100                                      | -30~+75                     | 20                          | 60     | 0.5                 | 0.75                  | 55                       | 20 |
| 8005     |          | 150                           | 100                                      | -30~+75                     | 40                          | 120    | 1                   | 0.8                   | 60                       | 25 |
| 8006     |          | 150                           | 100                                      | -30~+75                     | 80                          | 240    | 5                   | 0.85                  | 60                       | 25 |
| 8101     |          | 150                           | 100                                      | -30~+75                     | 4                           | 11     | 0.15                | 0.65                  | 55                       | 20 |
| 8102     |          | 150                           | 100                                      | -30~+75                     | 9                           | 20     | 0.3                 | 0.7                   | 60                       | 25 |
| 8103     |          | 150                           | 100                                      | -30~+75                     | 16                          | 33     | 0.5                 | 0.75                  | 60                       | 25 |
| 8104     |          | 150                           | 100                                      | -30~+75                     | 27                          | 60     | 2                   | 0.8                   | 60                       | 25 |
| 8105     |          | 150                           | 90                                       | -30~+75                     | 50                          | 94     | 2.5                 | 0.85                  | 60                       | 25 |
| 8106     |          | 150                           | 90                                       | -30~+75                     | 50                          | 140    | 20                  | 0.9                   | 60                       | 25 |
| 8107     |          | 150                           | 90                                       | -30~+75                     | 80                          | 240    | 20                  | 0.9                   | 60                       | 25 |
| 8203     |          | 150                           | 90                                       | -30~+75                     | 12                          | 36     | 20                  | 0.9                   | 70                       | 15 |

## Cell resistance vs. illuminance



A. Measured with the light source of a tungsten lamp operated at a color temperature of 2856K.

B. Measured 10 seconds after removal of incident illuminance of 10 lux.

C. Gamma characteristic between 10 lux and 100 lux and given by

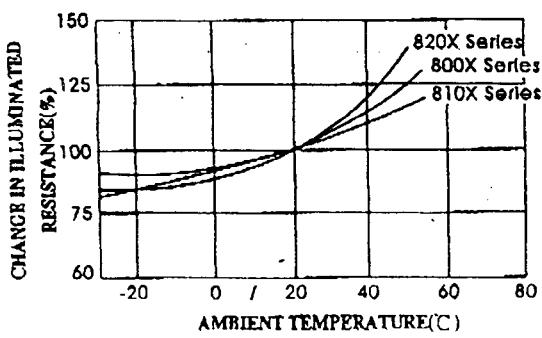
$$= \frac{\log(R100)-\log(R10)}{\log(E100)-\log(E10)}$$

Where R100, R10: cell resistances at 100 lux and 10 lux respectively  
E100, E10: illuminances of 100 lux and 10 lux respectively

D. The rise time is the time required for the cell conductance to rise to 63% of the saturated level. The decay time is the time required for the cell conductance to decay from the saturated level to 37%.

E. All characteristics are measured with the light history conditions: the CdS cell is exposed to light (100 to 500 lux) for one to two hours.

## Cell resistance vs. temperature



## Out-line Dimension.

