

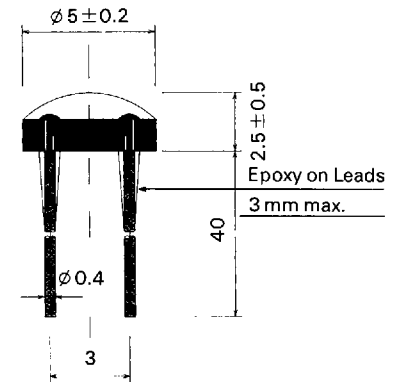
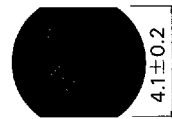
## Photoconductive Cells CdS

## A 90.0

- Epoxy Encapsulated
- Small Dimensions
- Operating temperature  
- 20°C...+ 70°C

### Applications

- Auto Flash for Cameras
- TV-Brightness Control
- Room Light Control
- Industrial Controls



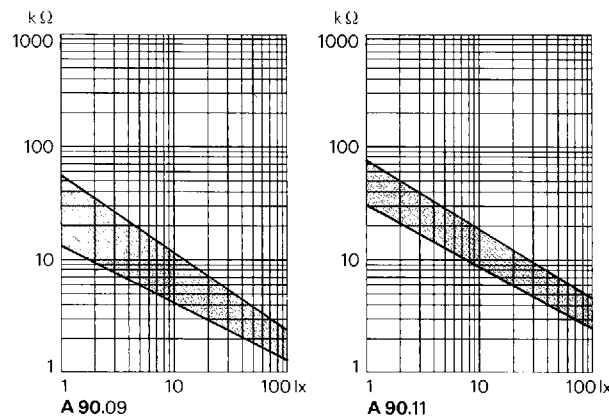
Type	R10 [kΩ]	R05 min [MΩ]	γ typ	Pmax [mW]	Vmax [V]
A 90.09	4-11	0.15	0.65	90	100
A 90.11	9-20	0.18	0.6	90	150
A 90.12	16-33	0.54	0.7	90	150
A 90.13	27-94	1.5	0.85	90	150
A 90.14	77-340	5	1.1	90	150

### Measuring Conditions

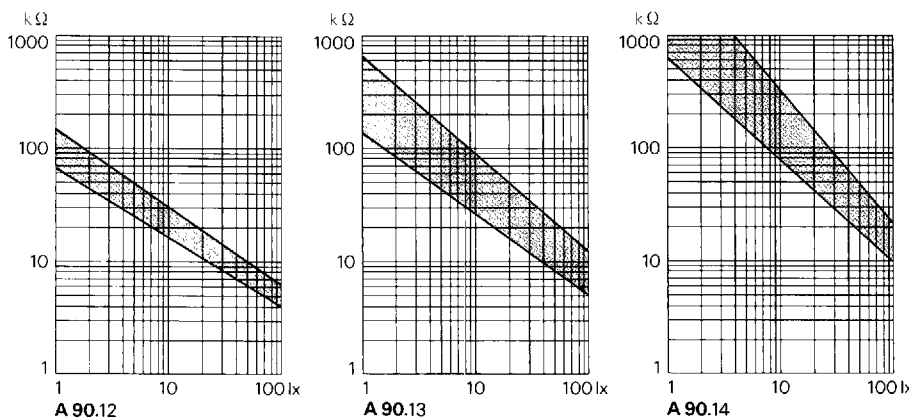
1. Light Resistance: measured at 10 lux with standard light A (2854 k color temperature) and 2 h pre-illumination at 500 lux prior testing
2. Dark Resistance: measured 5 seconds after removal of 10 lux
3. Characteristic: slope between 10 lux and 100 lux is calculated as follows:  

$$\gamma = \frac{\log(R_{10}/R_{100})}{\log(100/10)}$$
 R 10, R 100: Cell resistance at 10 lux and 100 lux.  
 Typical tolerance is ± 0.1 for single group
4. Pmax: Max. Power Dissipation at ambient temperature of 25°C.
5. Vmax: Max. Voltage in Darkness that may be applied to the cell continuously.

### Typical resistance values vs. Illumination characteristics



- A 90.09  
Special High Sensitivity Device.



### Long Time Stability

Stability of Resistance is guaranteed only when exposing cell to dark/bright conditions in regular time intervals.

### Photo Memory

A certain reversible deviation from original reading is possible, if cell is kept under unified illumination conditions, e.g. resistance value increase at continuous application of brightness and decreases at continuous application of darkness.

### Aging and Storage process

All photocells have been subjected to an artificial aging process prior final testing in order to avoid aggravating changes of characteristic data. Photocells should not exceed maximum temperature of 70°C and 50%r.h.

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