

# NORP CdS PHOTOCONDUCTIVE CELLS

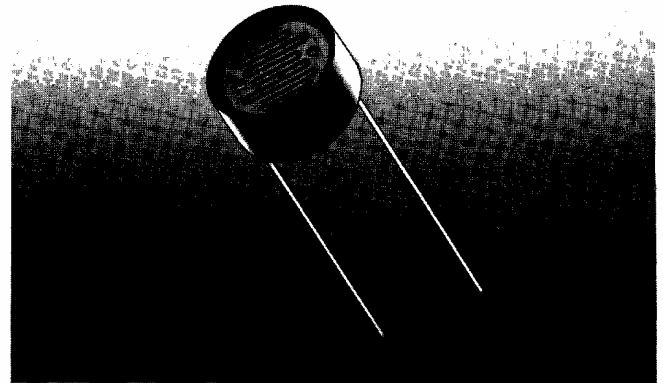
## FEATURES

- Maximum power Dissipation @ 30°C: 250mW
- Resistance Tolerance:  $\pm 40\%$  @ 1 Ftc
- Temperature Range:  $-60^{\circ}\text{C}$  to  $+75^{\circ}\text{C}$

NORP-11, 12, 13 SERIES

## GENERAL DESCRIPTION

The NORP series are highly stable, sensitive CdS photoconductive cells with a spectral response similar to that of the human eye. This series available in three resistance ranges, is packaged in a moisture resistant epoxy filled plastic casing.



Silonex Part No.	Sensitive Material	Resistance @ 1 Ftc (ohms)	Typical Resistance @ 100 Ftc (ohms)	Minimum Dark Resistance (ohms)	Maximum Voltage Rating Peak AC or DC	Maximum Current (mA)
NORP-11	Type 4 CdS Peak @ 530nm	20 K	800	2.5 M	320	75
NORP-12		9 K	400	1.0 M	320	75
NORP-13		4 K	200	0.5 M	320	75

Silonex Part No.	Sensitive Material	Rise Time (ms) Dark To 110% R <sub>L</sub> (1)		Decay Time (ms) To 10xR <sub>L</sub> (1)		Typical Temperature Coefficient (%/°C)		Typical Capacitance in Dark (pF)
		@ 1 Ftc	@ 100 Ftc	from 1 Ftc	from 100 Ftc	@ 1 Ftc	@ 100 Ftc	
NORP-11	Type 4 CdS	20	2.0	60	30	0.2	0.01	3.5
NORP-12		18	2.8	120	48	0.08	0.03	3.5
NORP-13		25	3.0	200	100	0.08	0.03	3.5

(1) R<sub>L</sub> Photocell resistance under given illumination

MEASUREMENT DATA: Cells light adapted at 30-50 Ftc for 16 hours minimum prior to test. All measurements conducted at 25°C ambient, 2854°K.

Dark resistances measured 15 seconds after removal of light. Power derating: Linearly to 75°C.

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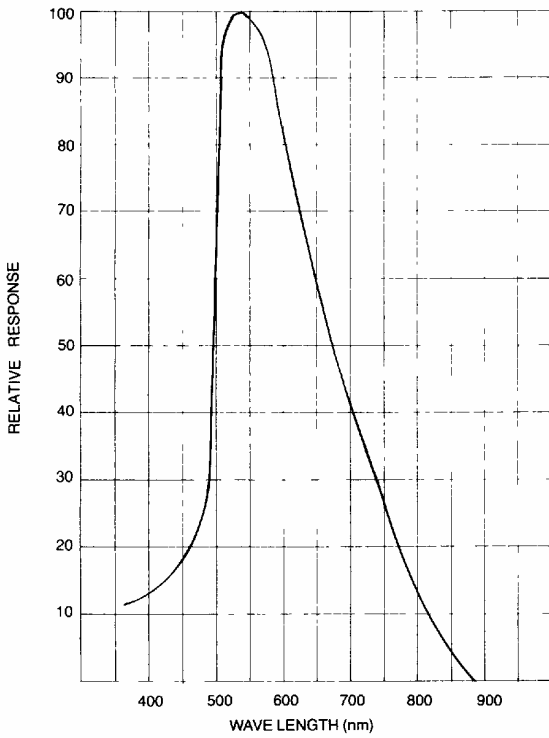


Fig. 1 Spectral Response  
Cadmium Sulphide

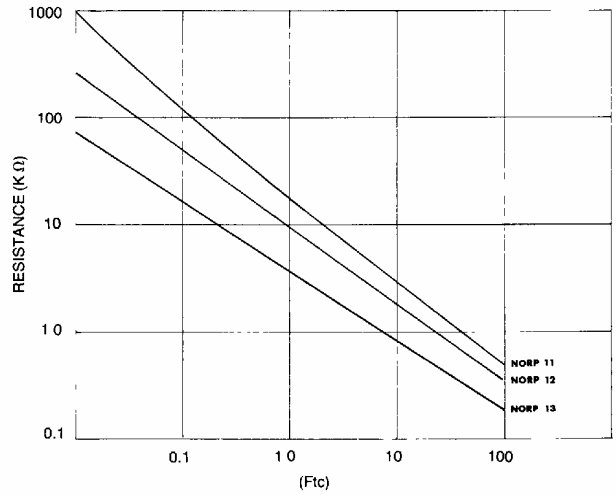


Fig. 2 Resistance versus Illumination

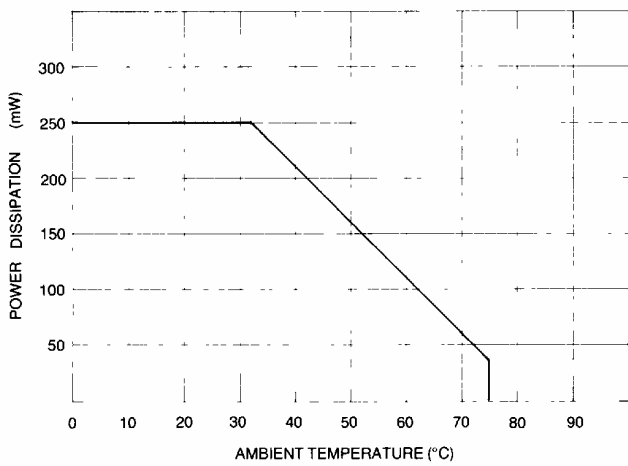
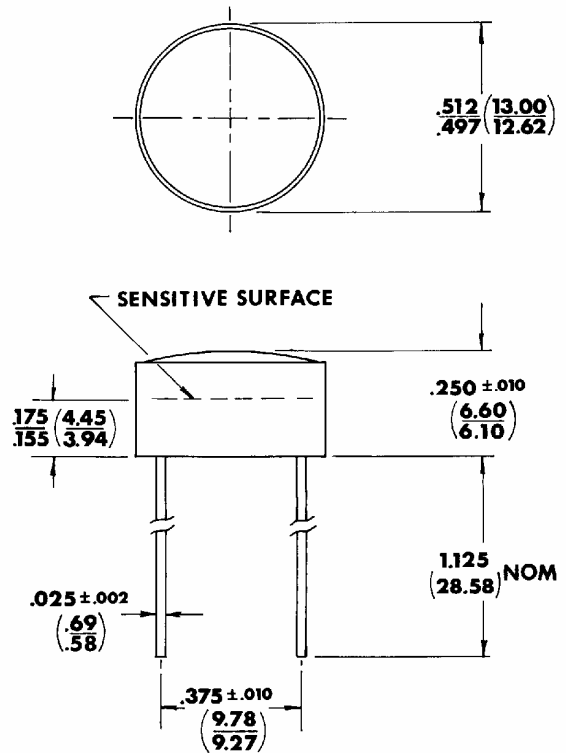


Fig. 3 Power Dissipation Derating



Units in inches (millimeters)

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