GENERAL DATA
Spectral Response ........................................ See Curve
Wavelength of Max. Response ......................... 6100 ± 400 Angstroms
Sensitive Material ........................................ Cadmium-Sulfide
Shape of Sensitive Area ................................ Circular
Construction .............................................. Hermetically Sealed in Glass
Outline ...................................................... See Drawing
Operating Position ...................................... Any

ELECTRICAL DATA
RATINGS (Absolute Maximum Values)
Breakdown Voltage\(^2\) ................................... 400 VAC
Dissipation
T-amb = 25°C ............................................. 300 mW
T-amb = 70°C ............................................. 25 mW
Ambient Temperature Range ........................... -40 to +70 °C
Illumination .............................................. Note 3

CHARACTERISTICS
Cell Resistance\(^4\)
Illumination 2 FC ........................................... 16,000 Ohms
Color Temperature 2870°K ................................
Dark Resistance\(^5\) ....................................... 1,600,000 Ohms Min.

NOTES:
1. Minute increases in relative humidity will produce change in color.
2. Measured with cell in complete darkness at a pulse rate of 120 pps, 50 μ sec. duration. Voltage in excess of the rated value may damage the cell. Maximum DC voltage is limited by maximum dissipation and minimum dark resistance rating.
3. Care should be exercised to prevent localized overheating of the sensitive surface when the cell is used with a test system.
4. Measured after 60 minutes exposure to approximately 50 FC illumination (ambient room light).
5. Measured in complete darkness, 10 seconds after removal of 2 FC illumination.

QUICK REFERENCE DATA
The Sylvania Type 8347 is a cadmium sulfide photoconductive cell featuring high sensitivity and hermetically sealed-in-glass construction. The cell is back-filled with gas for a high dissipation safety factor and high voltage capability and includes a blue-dot compound which turns pink\(^1\) if the cell envelope becomes damaged. The 8347 has a cell resistance of 16,000 ohms at 2 F.C. It is designed for use in a wide variety of industrial applications, and is particularly suited to direct operation of relay.

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Electronic Components Group
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File Under
PHOTOCONDUCTORS

from JEDEC release #3896B, Oct. 4, 1965
SPECTRAL CHARACTERISTIC OF HUMAN EYE, TUNGSTEN AND FLUORESCENT LAMPS

TUNGSTEN LAMP COLOR TEMPERATURE, 2870° K

EYE CURVE IS ON BASIS OF EQUAL VALUES OF RADIANT FLUX AT ALL WAVELENGTHS

AVERAGE CHARACTERISTICS

COLOR TEMPERATURE OF SOURCE = 2870° K

CURRENT IN MA

CELL VOLTAGE