

PE55

PHOTO ELECTRIC CELL

GENERAL

The Ediswan PE55 is a Gas Filled Photo Electric Cell with a rectangular wire anode and Caesium-Oxygen-Silver Cathode Surface having Maximum sensitivity in the red and infra-red regions of the spectrum.

RATING

Average Overall Sensitivity (approx) ($\mu\text{A}/\text{Lumen}$)	90†
Average Primary Sensitivity ($\mu\text{A}/\text{lumen}$)	20*
Maximum Gas Amplification Factor $A_g(\text{max})$	9§
Maximum Working Voltage (volts)	90
Maximum Average Cathode Current (μA) $I_k(\text{av})\text{max}$	6†
Maximum Peak Cathode Current (μA) $I_k(\text{pk})\text{max}$	20
Maximum Peak Cathode Current Density ($\mu\text{A}/\text{sq.cm}$)	15
Maximum Dark Current (μA) $I_{\text{dark}}(\text{max})$	0.1§
Minimum Insulation Resistance between electrodes (megohms)	10 ⁶

NOTES

† Measured at 0.085 lumens with lamp at colour temperature 2,700° K and a cell series resistance of 1 Megohm.

§ Gas Amplification factor is a ratio of current at 90 volts to current at 25 volts under the above conditions.

§ Measured at 90 volts and 1 Megohm series resistance; zero illumination.

* The Primary Sensitivity is measured at an anode voltage of 25, at which ionisation has not taken place.

† Averaged over a period not greater than 30 seconds.

All Maximum Ratings are absolute values, not Design Centres.

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INTERELECTRODE CAPACITANCE (pF)

Anode to Cathode	c_{a-k}	3.1
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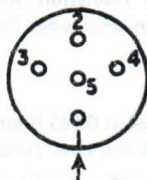
DIMENSIONS

Maximum Overall Length	(mm)	109
Maximum Seated Height	(mm)	94
Light Centre from Seat	(mm)	60 + 3
Maximum Bulb Diameter	(mm)	26.5
Maximum Base Diameter	(mm)	30.5
Cathode Length	(mm)	35
Cathode Width	(mm)	18
Projected Cathode Area	(sq.cm)	6.3
Approximate Nett Weight	(ozs)	1½
Approximate Packed Weight	(ozs)	2½

MOUNTING POSITION—Unrestricted

BASE—British 4 Pin.

Viewed from free
end of pins



Direction of light

CAP—CT1

VALVE HOLDER—Ediswan Clix VH42/4

CONNECTIONS

Pin 1	Anode	a
Pin 2	No Connection	NC
Pin 3	No Connection	NC
Pin 4	No Connection	NC
Top Cap	Cathode	k