

PE52
PHOTO-ELECTRIC CELL

GENERAL

The Mazda PE.52 is a vacuum Photo-Electric Cell with a Caesium-Oxygen-Silver Cathode Surface, having maximum sensitivity in the red and infra-red region of the spectrum.

RATING

Approximate Sensitivity ($\mu\text{A}/\text{lumen}$)	20 +
Max. Working Voltage (volts)	250
Max. Dark Current (μA)	0.1 ⁺
Max. Average Cathode current (μA)	8 •
Maximum Peak Cathode Current (μA)	25
Max. Peak Cathode Current Density ($\mu\text{A}/\text{sq.cm}$)	15
Min. Insulation resistance between electrodes ($\text{M}\Omega$)	1800

NOTES

- + Measured at 0.05 lumen with 90 volts applied, and a 0.5 $\text{M}\Omega$ series resistance: Lamp at colour temperature 2700°K.
- = Measured at 90 volts, with 0.5 $\text{M}\Omega$ series resistance: zero illumination.
- Averaged over a period not greater than 30 secs.

All Maximum Ratings are absolute values not Design Centres.

INTER-ELECTRODE CAPACITANCE

Anode to Cathode (μF)	1.9
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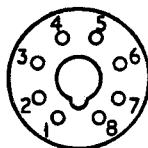
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DIMENSIONS

Maximum Overall Length (mm)	78.0
Maximum Seated Height (mm)	63.5
Light Centre from Seat (mm)	41.0 ± 2.5
Maximum Bulb Diameter (mm)	28.5
Maximum Base Diameter (mm)	32.0
Cathode Length (mm)	22.0
Effective Cathode Width (mm)	21.5
Projected Cathode Area (Sq.cm)	4.7
Approximate Nett Weight (oz)	1
Approximate packed weight (oz)	$4\frac{1}{2}$

MOUNTING POSITION - Unrestricted

BASE - Mazda Octal (B.O.8) Direction of light



Viewed from free end of pins

CONNECTIONS

Pin 1	Cathode	k
Pin 2	\$ Internal Connection	1.c
Pin 3	-	-
Pin 4	-	-
Pin 5	Anode	a
Pin 6	-	-
Pin 7	-	-
Pin 8	-	-

\$ In use Pin 2 should be left free