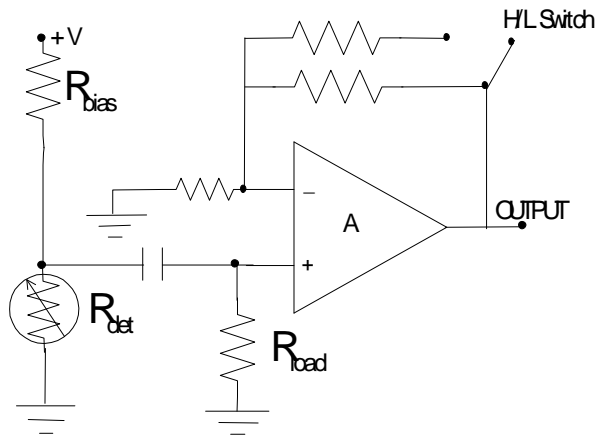
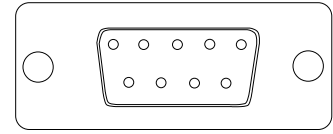


## PBSE SERIES PHOTONDUCTOR / RECEIVER

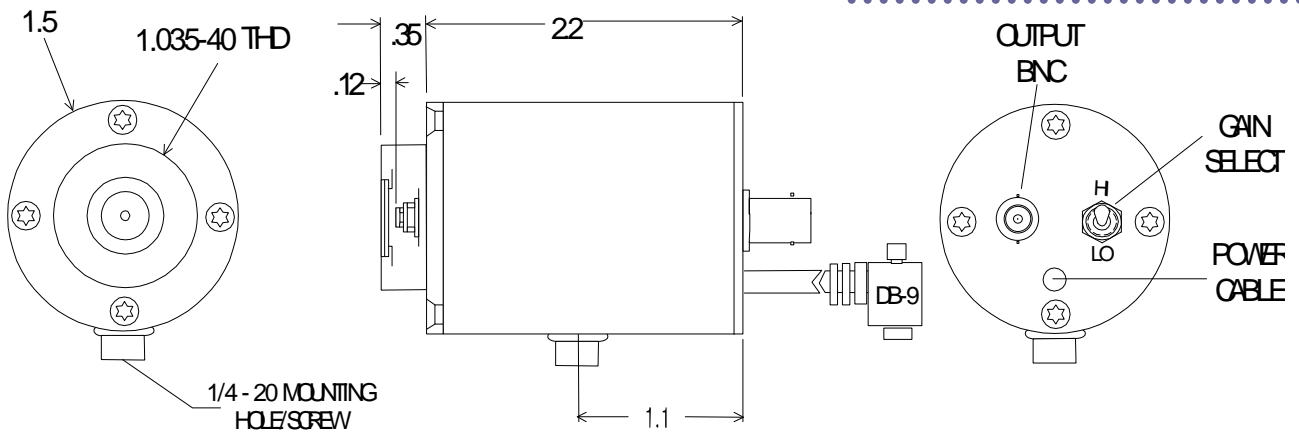


**Part no: PBSE-050-H**



**DB-9 PIN OUT**

- |   |            |   |          |
|---|------------|---|----------|
| 1 | NO CONNECT | 6 | +V       |
| 2 | NO CONNECT | 7 | -V       |
| 3 | NO CONNECT | 8 | GND      |
| 4 | NO CONNECT | 9 | CASE GND |
| 5 | NO CONNECT |   |          |



**Application Note** This unit is a high performance photoconductor/receiver operated at ambient temperature with a dual gain voltage amplifier. The detector's bias voltage is linked to the amplifier power supply and no additional biasing is necessary. The PC/AMP is an AC coupled dual gain detector system requiring a modulated input signal for operation.

### SPECIFICATIONS

<b>Detector Type</b>	5 x 5 mm PbSe Photoconductor
<b>Operating Temperature- °C</b>	22
<b>Operating Wavelength - μm</b>	1.0 – 4.5
<b>Responsivity- V/W @ pk</b>	$2.5 \times 10^4 / 10^3$
<b>Noise- V/Hz<sup>1/2</sup></b>	$0.5 \times 10^{-5} / 10^{-6}$
<b>NEP- W/Hz<sup>1/2</sup> @ pk</b>	$2 \times 10^{-10}$
<b>Bandwidth (-3dB)- Hz</b>	10 – 2kHz
<b>Power Requirements</b>	+/- 9 VDC to +/- 15 VDC
<b>Connections</b>	BNC signal output. Shielded power cable terminated with a DB-9 connector directly couples the unit with the PS -1 Low Noise Power Supply.