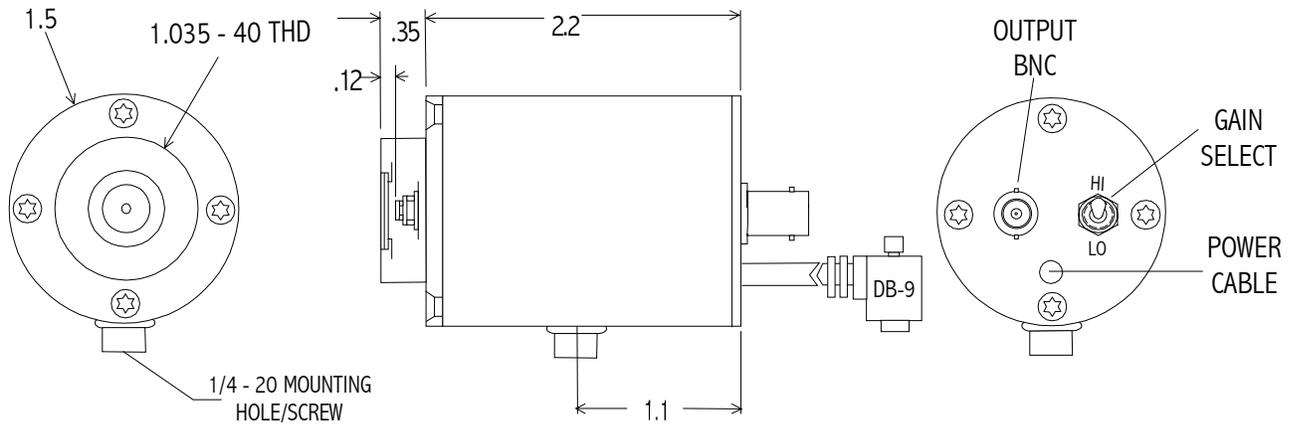
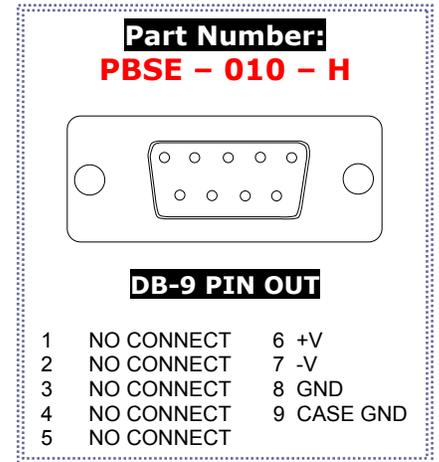
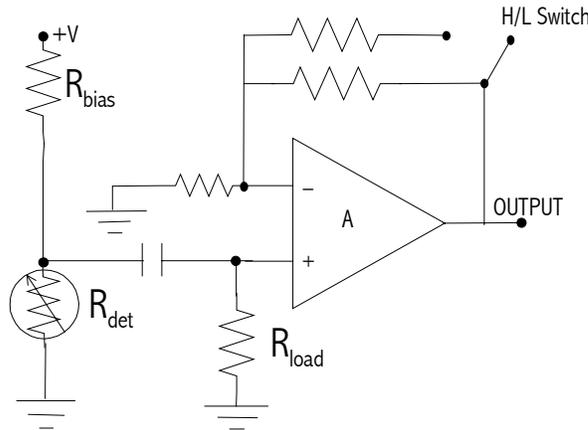


## PBSE - SERIES PHOTONDUCTOR / RECEIVER



### 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>	<b>1 x 1 mm PbSe Photoconductor</b>
<b>Operating Temperature- °C</b>	<b>22</b>
<b>Operating Wavelength - μm</b>	<b>1.0 – 4.5</b>
<b>Responsivity - V/W @ pk</b>	<b>10<sup>6</sup> / 10<sup>5</sup></b>
<b>Noise - V/Hz<sup>1/2</sup></b>	<b>2 x 10<sup>-5</sup> / 5 x 10<sup>-6</sup></b>
<b>NEP- W/Hz<sup>1/2</sup> @ pk</b>	<b>2 x 10<sup>-11</sup></b>
<b>Bandwidth (-3dB)- Hz</b>	<b>5 – 10 kHz</b>
<b>Power Requirements</b>	<b>+/- 9 VDC to +/- 15 VDC</b>
<b>Connections</b>	<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.</b>