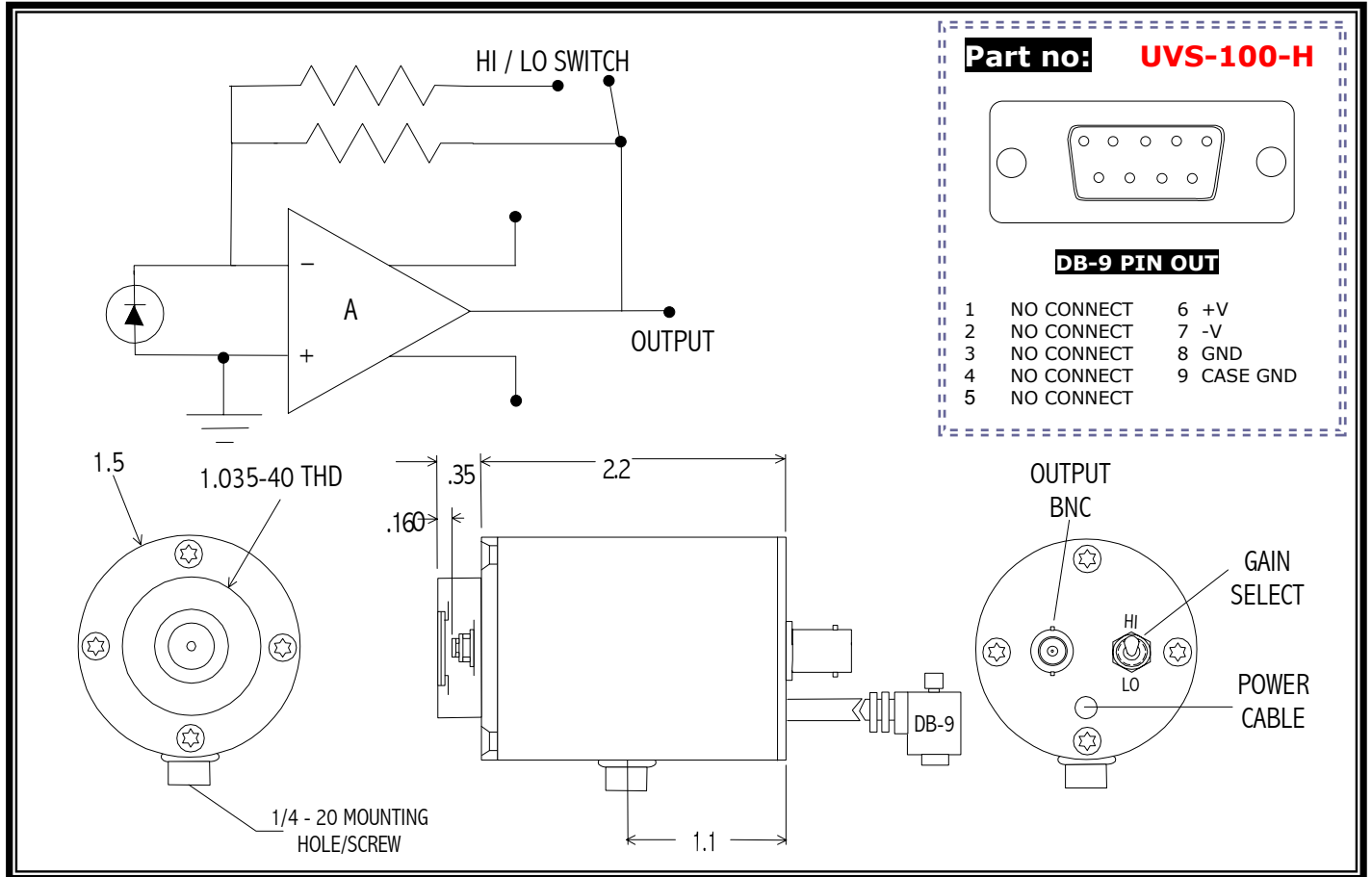


## H-Series Photodiode / Receiver



**Application Note** This unit is a high performance photodiode/receiver operated with at ambient temperature with a dual gain FET input transimpedance amplifier. The output voltage is proportional to the input signal current:  $V_{out} = I_{signal} \cdot R_f$ . The PD/AMP is a DC coupled dual gain system. Care should be taken in shielding the unit from stray light during operation to prevent saturation of the amplifier (and potential failure).

### SPECIFICATIONS

<b>Detector Type</b>	<b>10mm x 10mm UV-Enhanced Silicon Photodiode</b>
<b>Operating Temperature- °C</b>	<b>22</b>
<b>Operating Wavelength- μm</b>	<b>0.2 – 1.0</b>
<b>Responsivity- V/W @ pk</b>	<b><math>0.5 \times 10^8 / 10^7</math></b>
<b>Noise- V/Hz<sup>1/2</sup></b>	<b><math>1 \times 10^{-6} / 1 \times 10^{-5}</math></b>
<b>NEP- W/Hz<sup>1/2</sup> @ pk</b>	<b><math>1.5 \times 10^{-14}</math></b>
<b>Bandwidth (-3dB)- Hz</b>	<b>DC – 2kHz nom</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>