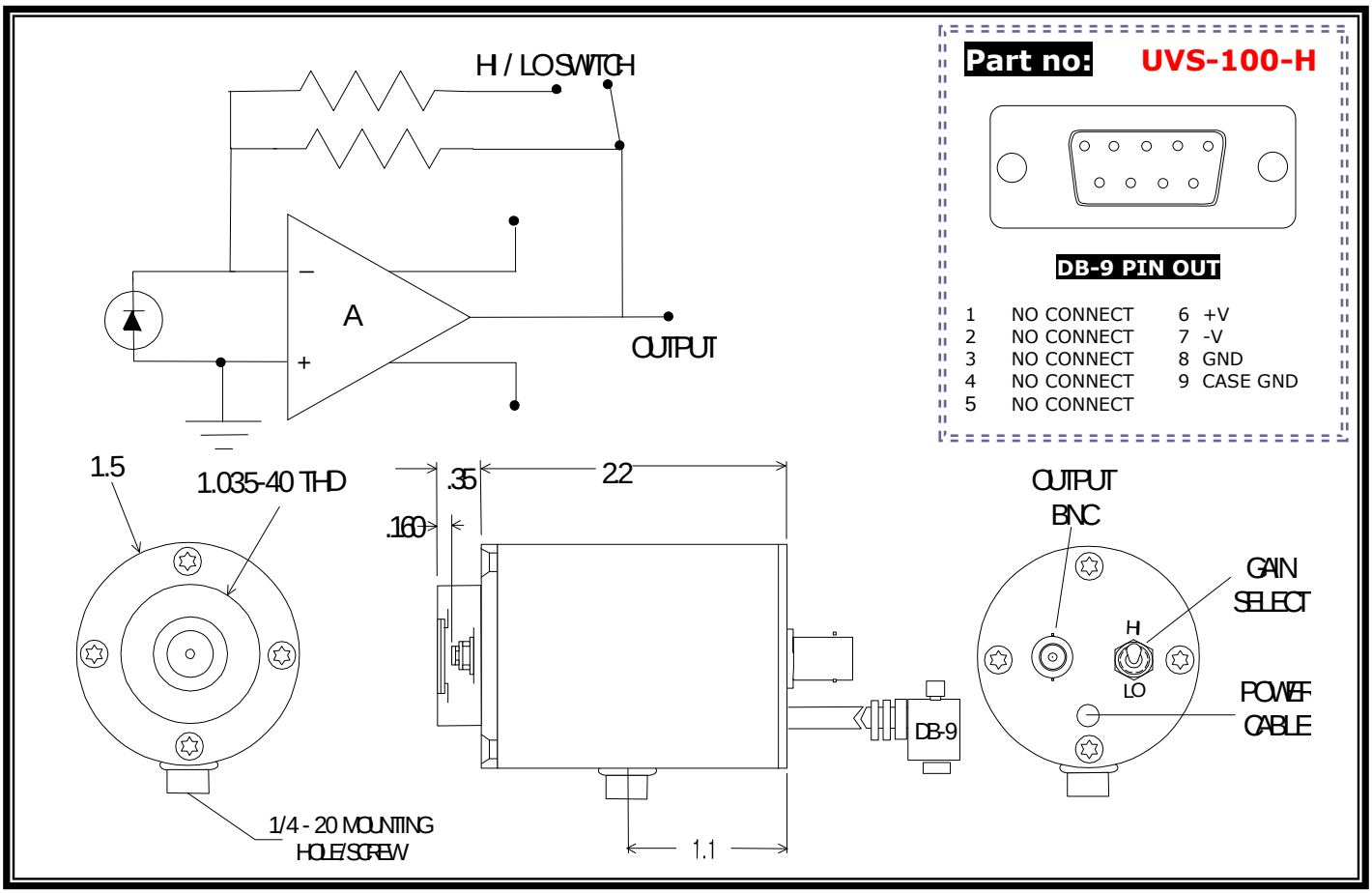
H-Series Photodiode / Receiver



Application Note

This unit is a high performance photodiode/receiver operated with at ambient temperature with a dual gain FET input transimpedence 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	
Detector Type	**10mm x 10mm UV-Enhanced Silicon Photodiode**
Operating Temperature- °C	**22**
Operating Wavelength- µm	**0.2 – 1.0**
Responsivity- V/W @ pk	**0.5 x 10^8 / 10^7**
Noise- V/Hz$^{1/2}$	**1 x 10^{-6} / 1x10^{-5}**
NEP- W/Hz$^{1/2}$ @ pk	**1.5 x 10^{-14}**
Bandwidth (-3dB)- Hz	**DC – 2kHz nom**
Power Requirements	**+/- 9 VDC to +/- 15 VDC**
Connections	**BNC signal output. Shielded power cable terminated with a DB-9 connector directly couples the unit with the PS -1 Low Noise Power Supply.**

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