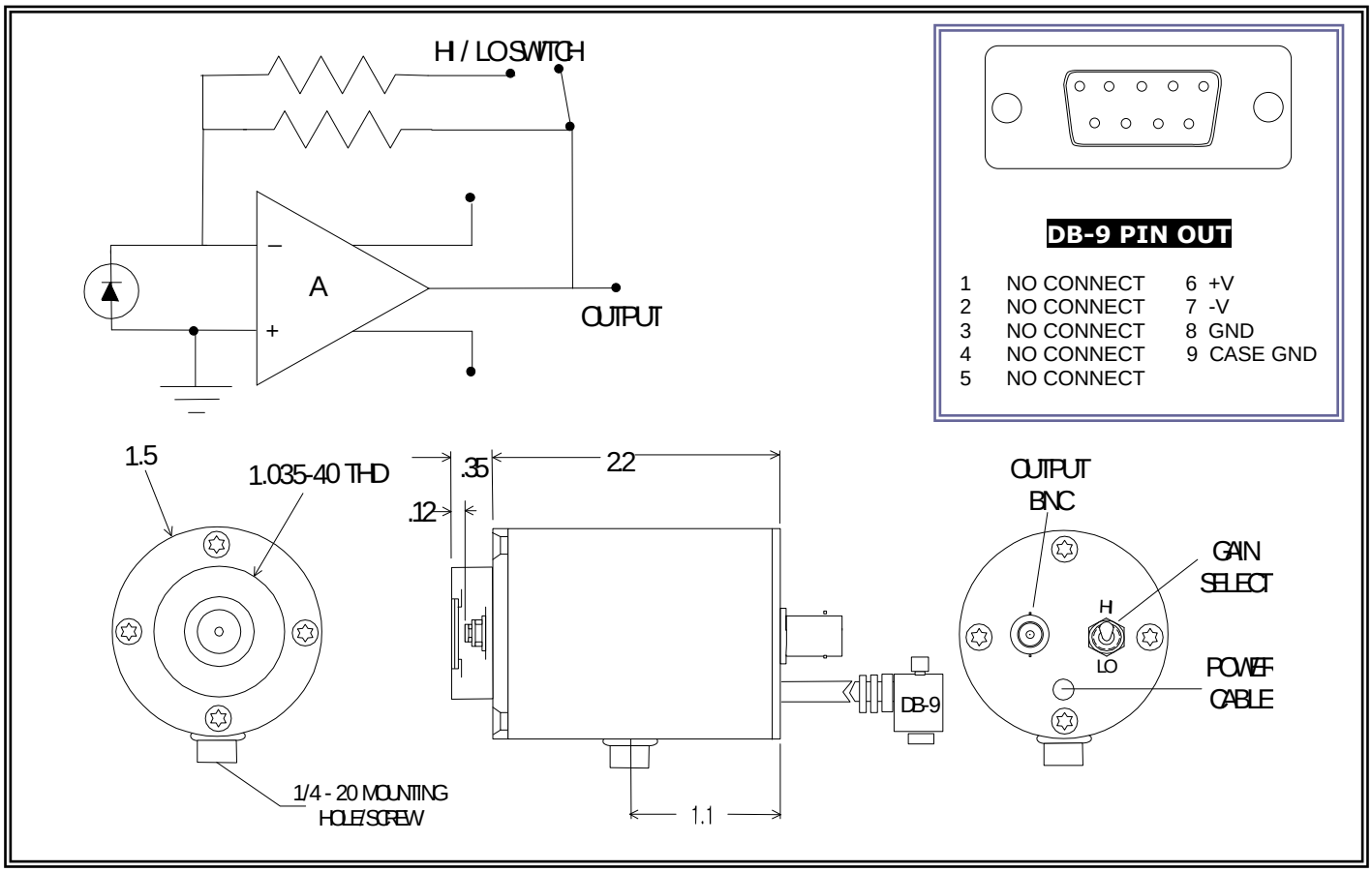
Receiver Modules

SILICON PHOTODIODE RECEIVERS



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 @ 22° C NOM.	
Part Number	**S – 010 - H**
Active Area	**1 mm dia**
Operating Wavelength- μm	**0.3 – 1.0**
Responsivity- V/W @ pk	**0.5×10^{9} / 10^{8}**
Noise- $V/Hz^{1/2}$	**5.0×10^{-6} / 0.5×10^{-6}**
NEP- $W/Hz^{1/2}$ @ pk	**$< 1.0 \times 10^{-14}$**
Bandwidth (-3dB)- Hz	**DC – 500 / 2k**
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.**

RoHS Compliant

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UVS and S-series PHOTODIODE
Typical Spectral Response - 22C