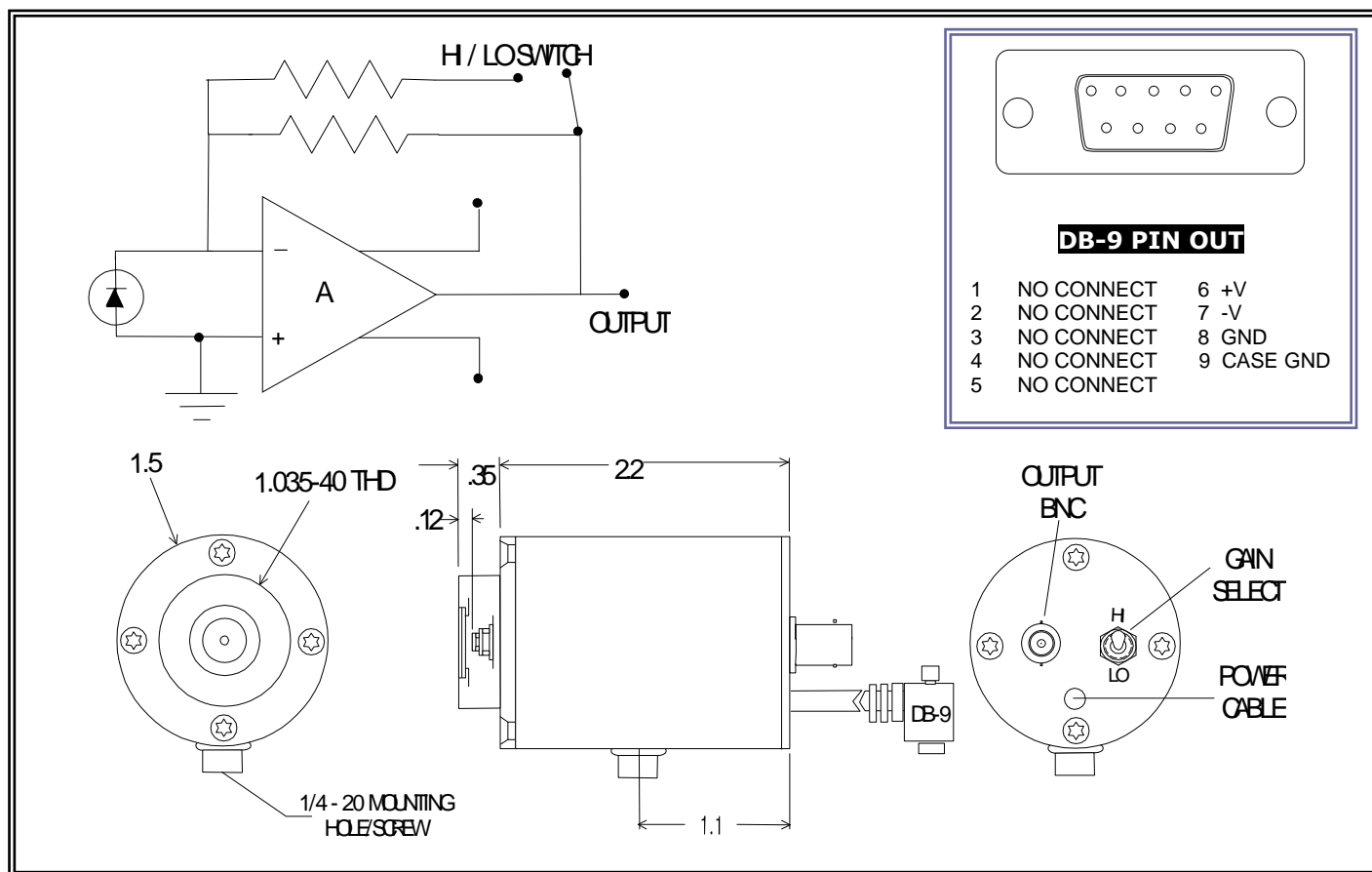


## SILICON PHOTODIODE RECEIVERS



**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 @ 22° C NOM.

Part Number	<b>S - 010 - H</b>		
Active Area	1 mm dia		
Operating Wavelength- $\mu\text{m}$	0.3 - 1.0		
Responsivity- V/W @ pk	$0.5 \times 10^9 / 10^8$		
Noise- V/Hz <sup>1/2</sup>	$5.0 \times 10^{-6} / 0.5 \times 10^{-6}$		
NEP- W/Hz <sup>1/2</sup> @ 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*

# UVS and S-series PHOTODIODE

## Typical Spectral Response - 22C

