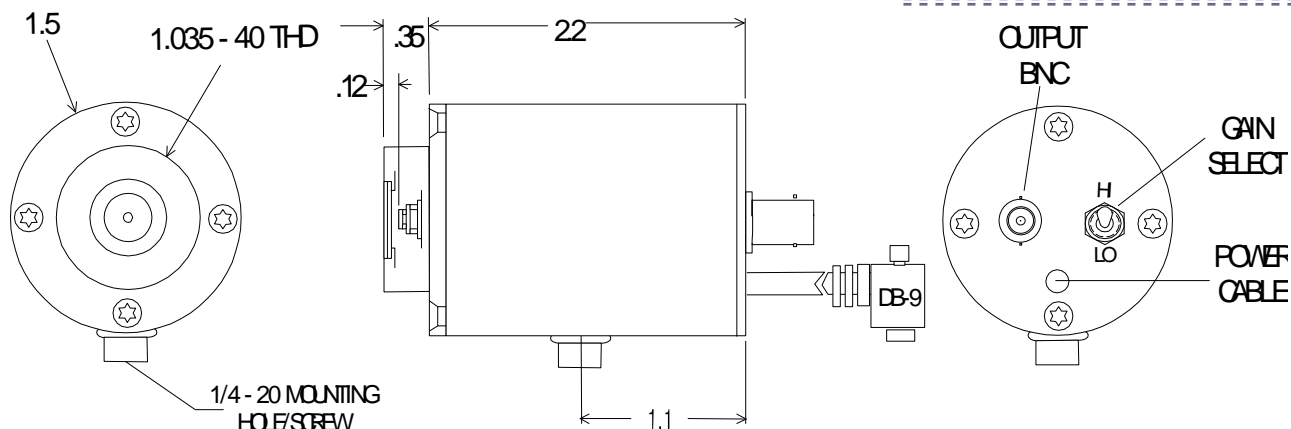
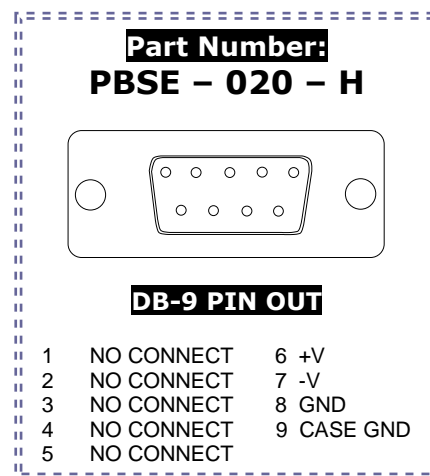
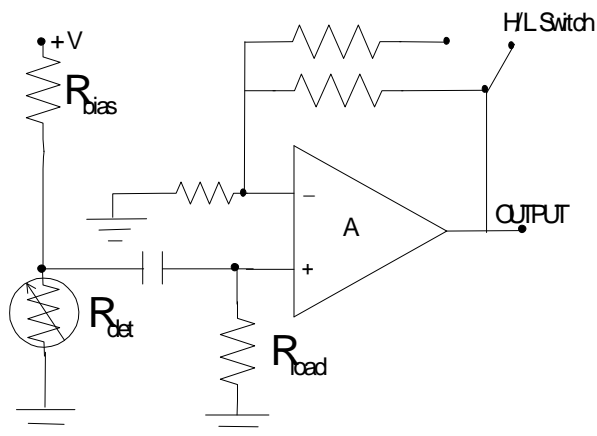


PBSE - SERIES PHOTOCONDUCTOR / RECEIVER



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

SPECIFICATIONS	
Detector Type	2 x 2 mm PbSe Photoconductor
Operating Temperature- °C	22
Operating Wavelength - μm	1.0 – 4.5
Responsivity - V/W @ pk	10⁶ / 10⁵
Noise - V/Hz^{1/2}	5 x 10⁻⁵ / 5 x 10⁻⁶
NEP- W/Hz^{1/2} @ pk	5 x 10⁻¹¹
Bandwidth (-3dB)- Hz	10 – 2kHz
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.