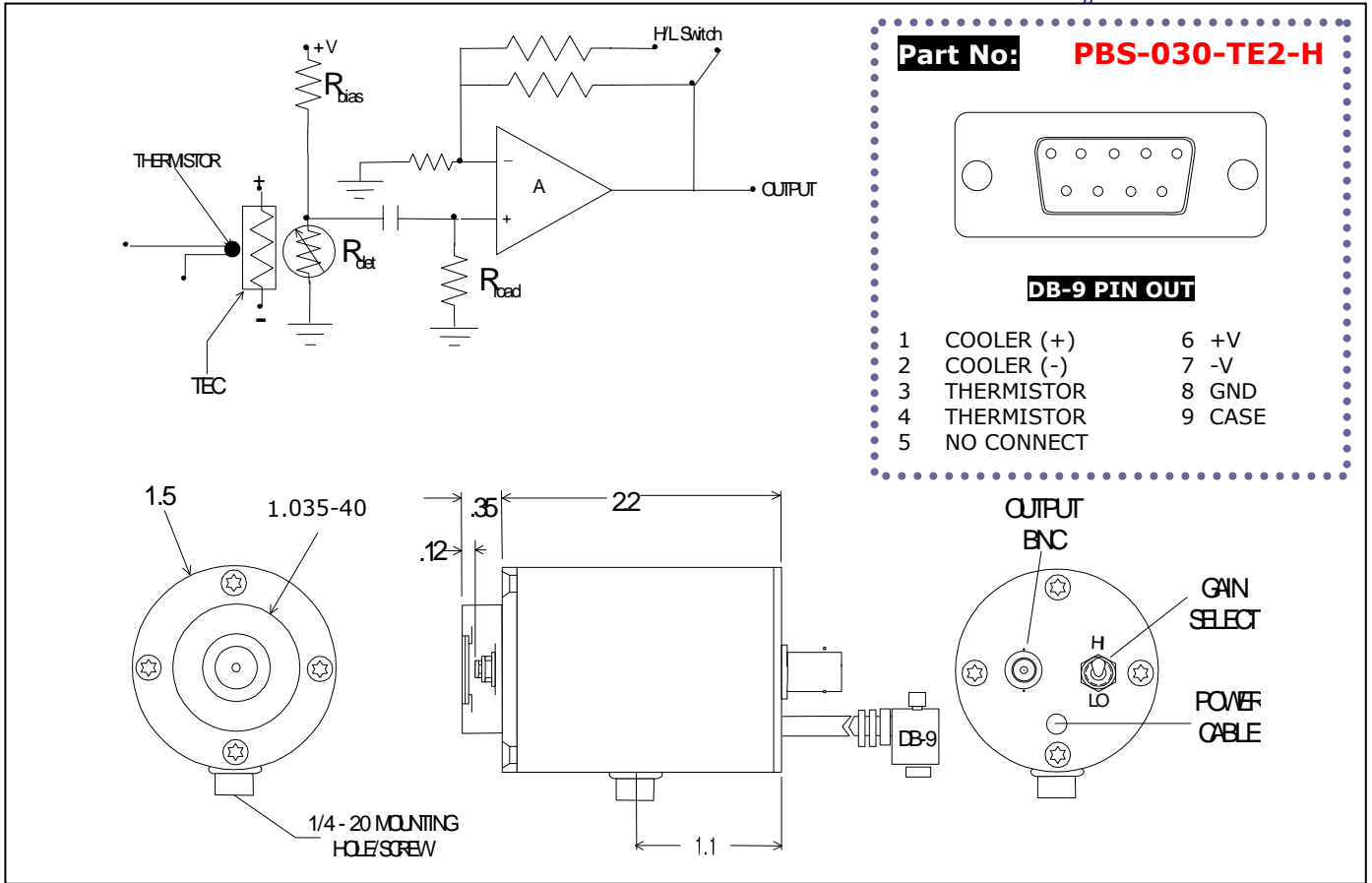


## H - SERIES PHOTONDUCTOR / RECEIVER



**Application Note** This unit is a high performance photoconductor/receiver operated with a thermoelectric cooler for stabilization/cooling 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

Detector Type	3 x 3 mm PbS Photoconductor	
Operating Temperature- °C	22 @ $I_{tec} = 0.0 \text{ A}$	-30 @ $I_{tec} = 0.6 \text{ A}$
Operating Wavelength - $\mu\text{m}$	1.0 - 2.8	1.0 - 2.8
Responsivity- V/W @ 2.6	$10^7 / 10^6$	$2 \times 10^7 / 10^6 \text{ typ}$
Noise- V/Hz <sup>1/2</sup> @ 400 Hz	$3 \times 10^{-5} / 10^{-6}$	$2 \times 10^{-5} / 10^{-6}$
NEP- W/Hz <sup>1/2</sup> @ 2.6, 400 Hz	$< 3 \times 10^{-12}$	$< 1.0 \times 10^{-12}$
Bandwidth (-3dB)- Hz	5 - 500	5 - 400
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/TC-1 Low Noise Power Supply.	

**RoHS Compliant**