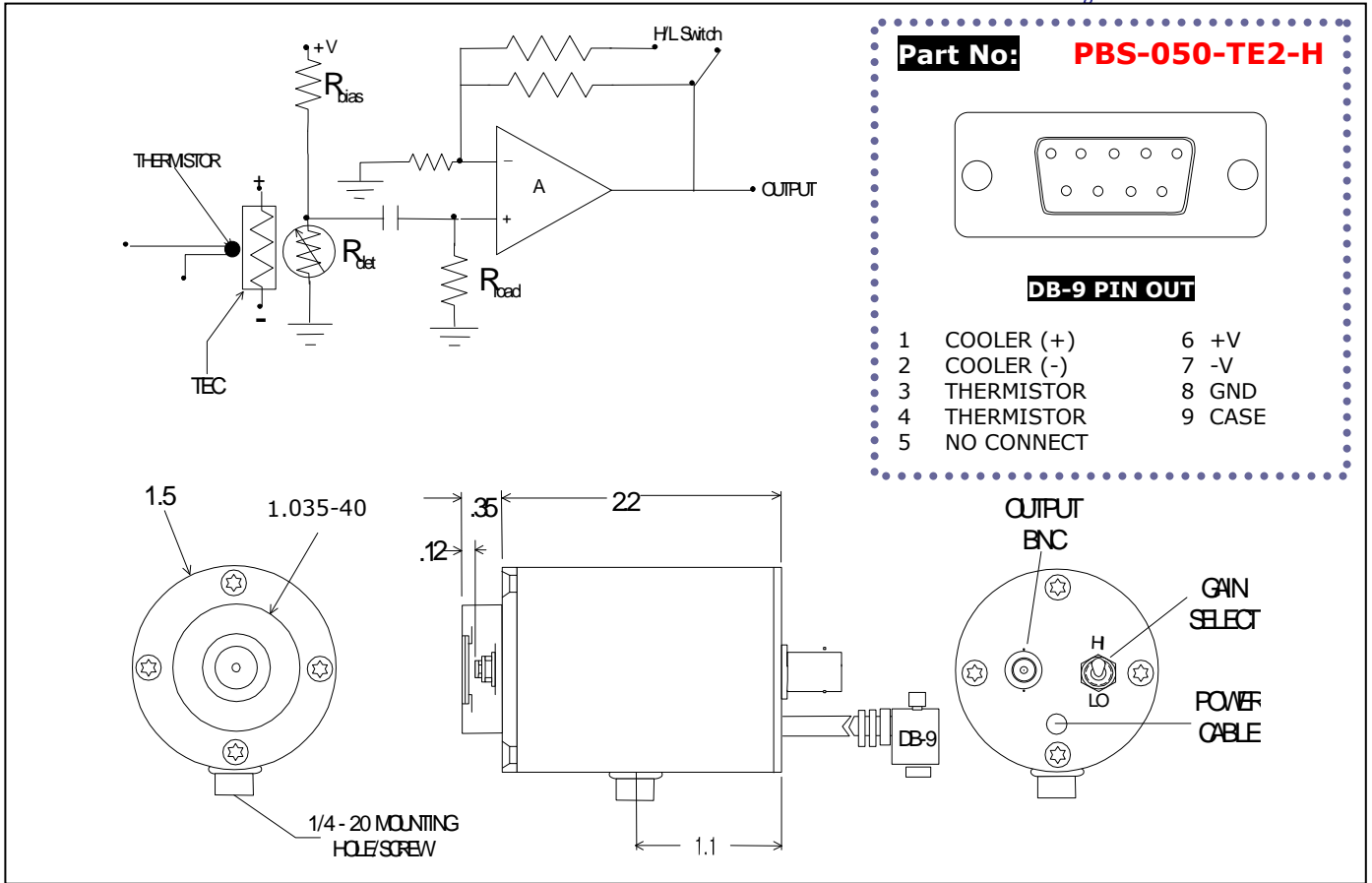


H - SERIES PHOTCONDUCTOR / RECEIVER



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	5 x 5 mm PbS Photoconductor	
Operating Temperature- °C	22 @ I _{tec} = 0.0 A	-20 @ I _{tec} = 0.65 A
Operating Wavelength - μm	1.0 - 2.8	1.0 - 2.8
Responsivity- V/W @ 2.6	10 ⁶ / 10 ⁵	2 x 10 ⁶ / 10 ⁵ typ
Noise- V/Hz ^{1/2} @ 400 Hz	7.5 x 10 ⁻⁶ / 10 ⁻⁷	5 x 10 ⁻⁶ / 10 ⁻⁷
NEP- W/Hz ^{1/2} @ 2.6, 400 Hz	< 6.5 x 10 ⁻¹²	< 2.5 x 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