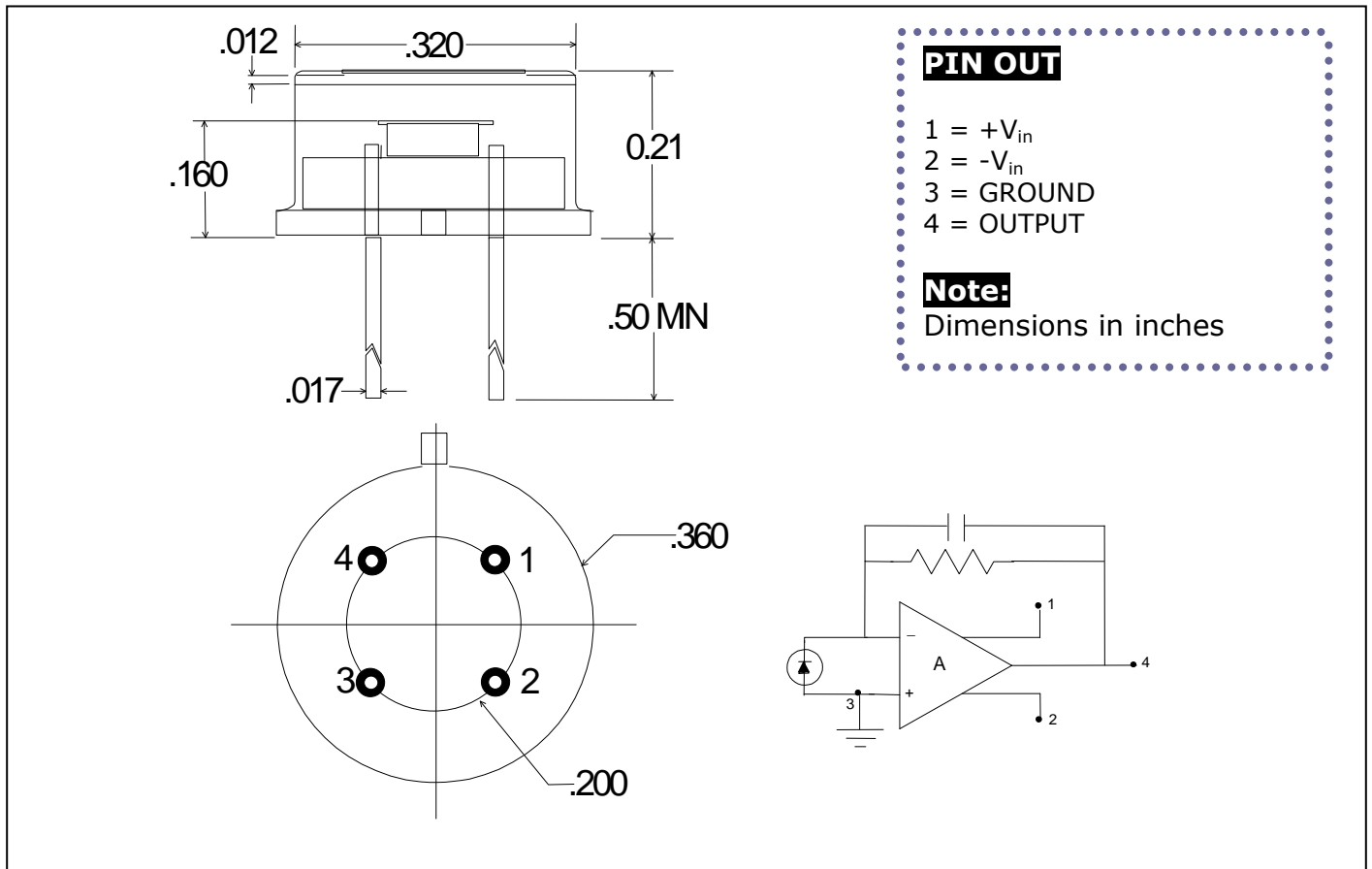


## E5 - SERIES TO - STYLE RECEIVERS



**Application Note** The preamplifier portion of this receiver is a transimpedance current to voltage converter. Its output voltage is proportional to the input signal current:

$$V_{out} = I_{signal} \times R_{feedback}$$

This photodiode/amplifier is a DC coupled, high gain system and care should be taken to shield the unit from stray light during operation. This will help prevent saturation of the amplifier, which could lead to failure of the unit. Obtaining stable, long term operation will require suitable heat sinking.

### SPECIFICATIONS

Detector Type	2.5mm Dia Silicon Photodiode		
Wavelength Range	300 – 1000 nm		
Part Number	<b>S-025-E5/1M</b>		
Output Responsivity, V/W	10 <sup>5</sup> @ 850 nm		
Output Noise, V/Hz <sup>1/2</sup>	0.4 x 10 <sup>-6</sup>		
Output Offset	200mV nom.		
Bandwidth	DC – 1MHz		
Power Requirements	+,- 5VDC to +,- 15VDC, 10 mA		