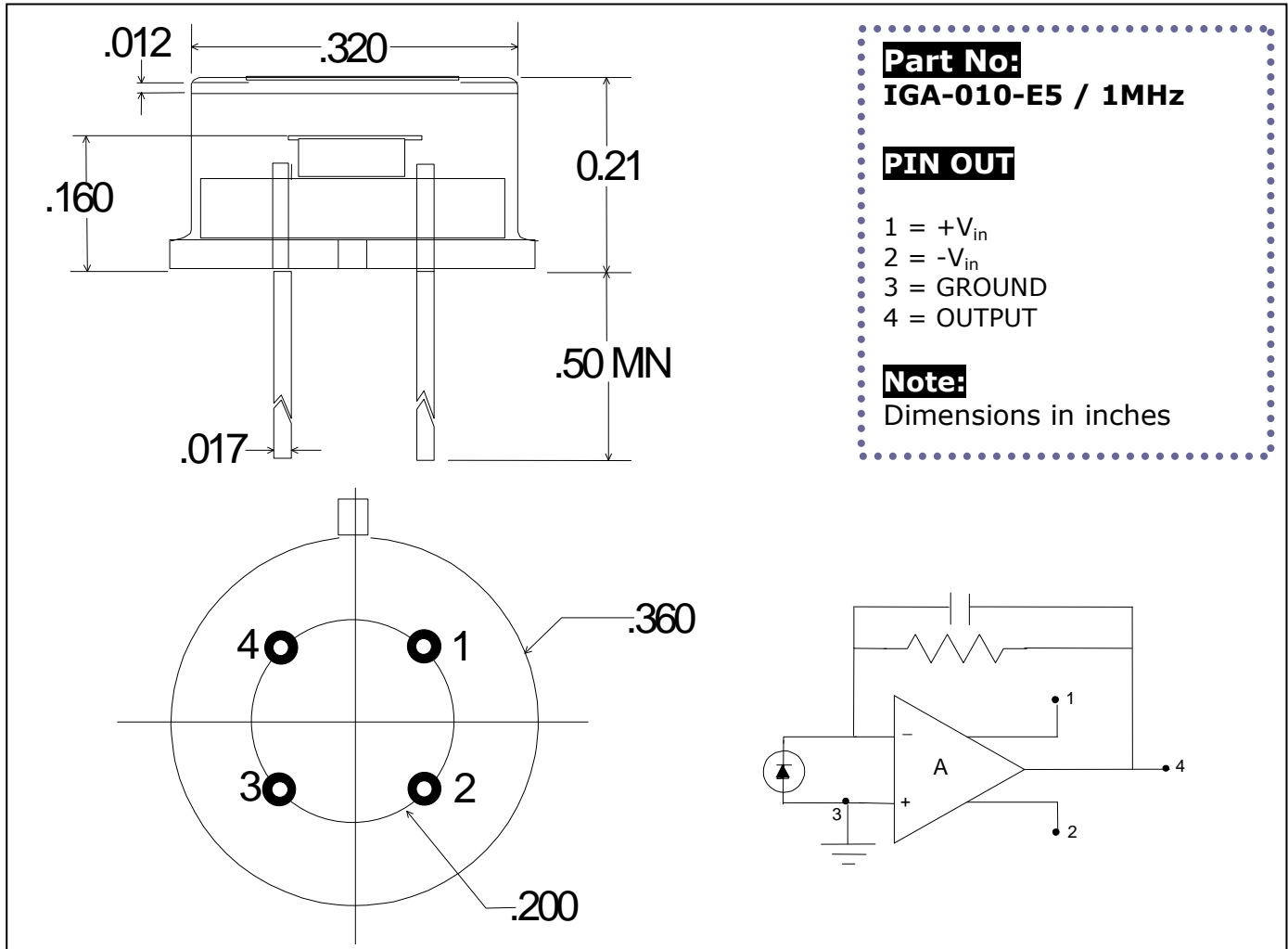


## TO - STYLE RECEIVERS



**Part No:**  
IGA-010-E5 / 1MHz

**PIN OUT**

- 1 = +V<sub>in</sub>
- 2 = -V<sub>in</sub>
- 3 = GROUND
- 4 = OUTPUT

**Note:**  
Dimensions in inches

### 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

<b>Detector Type</b>	<b>1mm Dia InGaAs Photodiode</b>
<b>Responsivity</b>	<b>1.5 x 10<sup>5</sup> V/W @ 1.3 μm</b>
<b>Noise Voltage</b>	<b>&lt; 0.2 x 10<sup>-6</sup> V/Hz<sup>1/2</sup></b>
<b>Offset Voltage</b>	<b>200 mV typ</b>
<b>Bandwidth</b>	<b>DC – 1 MHz (-3db)</b>
<b>Operating Wavelength - μm</b>	<b>1.0 – 1.7</b>
<b>Power Requirement</b>	<b>+,- 5VDC to +,- 15VDC, 20mA</b>

**RoHS Compliant**