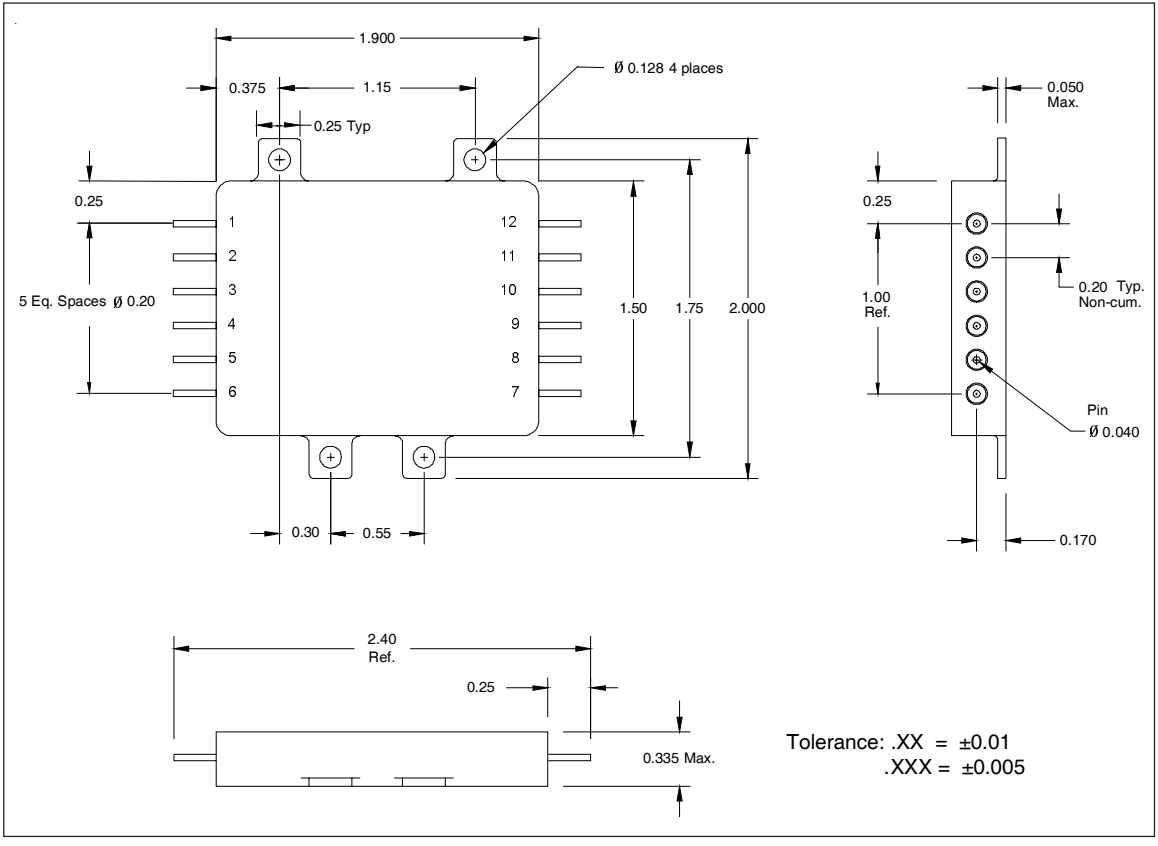Mechanical Outline