EXPERIMENT NO. 1
THE RESISTOR

I. Objective

1. To determine the minimum and maximum value of certain resistors.
2. To be able to identify if the value of a resistor is within the usable range.

II. Equipment & Materials

1 VOM or Digital Multimeter
40 Resistors of Assorted Values

III. Procedure

1. Determine the R_{MIN} and the R_{MAX} value of each resistor. The value from R_{MIN} to R_{MAX} is called the usable range.

   Formulas:

   $R_{MIN} = R - [Rv\,(TOL)]$
   $R_{MAX} = R + [Rv\,(TOL)]$

   Where:
   Rv is the rated resistance value of the resistor, ohm (Ω).
   TOL is the tolerance value of a certain resistor.

2. Measure the actual resistance value of the resistors and compare the range of R_{MIN} and R_{MAX}.

   If the actual resistance value is below R_{MIN} or greater than R_{MAX} the resistor is said to be bad.

   If the actual resistance value is within the range of R_{MIN} and R_{MAX} the resistor is said to be in good working condition.

IV. Observation

V. Conclusion