**Objective:**

1. To measurer the I-V Characteristics of Zener diode
2. To determine the voltage regulation for variable resistance and variable supply voltage

|  |  |  |  |
| --- | --- | --- | --- |
| Vi(Volt) | VR(Volt) | Vz(Volt) | Iz=VR/R(mA) |
| 1 | 0 | 0.97 | 0 |
| 2 | 0 | 1.95 | 0 |
| 3 | 0 | 2.99 | 0 |
| 4 | 0 | 3.98 | 0 |
| 5 | 0 | 5.01 | 0 |
| 6 | 0.05 | 6.01 | 0.105 |
| 7 | 0.98 | 6.98 | 2.074 |
| 8 | 1.98 | 7.98 | 4.191 |
| 9 | 2.90 | 8.92 | 6.138 |
| 10 | 3.99 | 10.05 | 8.446 |

Table1: Data for I-V Characteristics

|  |  |  |
| --- | --- | --- |
| Vi(Volt) | VL(Volt) | IL(Amp) |
| 10 | 6.04 | 0.8 |
| 1.5 |
| 2.3 |
| 3.3 |
| 4 |
| 5.1 |
| 5.9 |
| 6.6 |
| 7.2 |
| 8 |

Table2: Data for regulation due to load variation

|  |  |
| --- | --- |
| Vi(Volt) | VL(Volt) |
| 1 | 0.65 |
| 2 | 1.31 |
| 3 | 1.98 |
| 4 | 2.66 |
| 5 | 3.36 |
| 6 | 4.06 |
| 7 | 4.69 |
| 8 | 5.36 |
| 9 | 5.95 |
| 10 | 5.98 |

Table3: Data for regulation due to supply voltage variation





