**Faculty of Engineering and Technology**

**Department of Electrical And Computer Engineering**

**Electronics Lab**

**(ENEE3112)**

**Experiment #2 (Prelab)**

**Diode Characteristics and Applications**

**Student’s name: Mohammed Fkheidah**

**Student’s ID: 1172294**

**Instructor: Dr. Mohammed Ju’beh
Assistant: Eng. Yazan Ismael**

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**DIODE CHARACTERISTICS**

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**HALF - WAVE RECTIFICATION**

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|  |  |
| --- | --- |
| **Parameter** | **Value** |
| **T (ms) (period)** | **3ms** |
| **Vpk(peak voltage)** | **4.439V** |

**HALF - WAVE RECTIFICATION**

**The capacitor was added**

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**V max= 4.4652V**

**Vmin =3.709V**

**Vp-p= 4.4652-3.709 = 0.7562 V**

**Diode bridge circuit as a full wave rectifier:**

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**When we add capacitor**

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**Clipping:**

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**Vdc=1.5**

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**Vdc=0**

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**Vdc=3**

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**Clamping:**

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**Vdc=0**

**V output = 284.2m**

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**Vdc=1.5**

**V output=1.77v**

**Vdc=3v**

**Voutput=3v**

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**VOLTAGE MULTIPLIER CIRCUITS**

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