## Electronics Timeline

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1874 | 1879 | 1904 | 1906 | 1925 | 1947 | 1949 |
| Semiconductor Point-Contact Rectifier Effect is Discovered  Ferdinand Braun | First commercially viable light bulb (Edison) | First valve rectifier (Fleming Valve) based on Edison experiment in 1880's with a light bulb. | First valve electronic amplifier. Extends Fleming valve design by using a grid to control current between emitter and collector elements. | Julius Lilienfeld first Field Effect Transistor (FET) principle patent | William Schockley et al at Bell Labs demonstrated first germanium PNP point contact transistor (Bipolar Transistor) | First Integrated-Circuit-like patented by Werner Jacobi |
| 1952 | 1954 | 1958 | 1961 | 1968 | 1969 |  |
| Proposed concept of Integrated Circuits | First silicon transistor at Bell Labs | First integrated circuits made by Texas instruments Jack kilby | First IC processor chip. | First all silicon Integrated Circuit | Apollo 11 |  |

## Units of Measure in Electricity

|  |  |  |
| --- | --- | --- |
| **Unit** | **Used for** | **Named After** |
| Tesla | Magnetic flux density (SI) | Nikola Tesla |
| Gauss | Magnetic flux density (SI cgs) | Carl Friedrich Gauss |
| Maxwell | Magnetic flux density (SI cgs) | James Clark Maxwell |
| Volt | Electromotive Force | Alessandro Volta |
| Amp | Electromotive Flow (current) | Andre'-Marie Ampere |
| Ohm | Resistance/Reactance | Georg Simon Ohm |
| Farad | Capacitance | Michael Faraday |
| Coulomb | Charge | Charles-Augustine Coulomb |
| Henry | Inductance | Joseph Henry |
| Watts | Power | James Watts |
| Hertz | Frequency | Heinrich Hertz |