

The image contains several diagrams and photos illustrating LED applications:

- Top Row:** A row of various colored LEDs (green, yellow, red, white, blue, yellow).
- LED Anatomy:** A diagram of a red LED with labels: "Epoxy Encapsulation", "Die Mounted in Reflective Cup", "Soldered Case", "Lens", and "Lead".
- Electrical Symbols:** A diagram showing the electrical symbol for an LED, with "ANODE" and "CATHODE" labels. Below it is a circuit diagram of an LED connected to a battery.
- LED Array:** A photo of a yellow LED strip with a circuit diagram below it. Labels include "12V Power Source", "Resistor", "Cathode (-)", "Anode (+)", and "LEDs". A note says "Voltage = 12V, 3V going through each LED".
- LED with Resistor:** A diagram showing a blue LED connected to a 3V battery and a resistor. The resistor is labeled "resistor 150 Ω (brown, gray, brown)". Other LEDs listed are blue, aqua, white, pink, purple, and UV.
- Wiring Diagram:** A diagram showing a 2xAA battery holder with a switch. Wires connect the battery to a resistor and then to an LED. Labels include "Red (+) wire", "Solder 3 pieces", "Resistor", "Long Lead", "Short Lead of LED", and "Black (-) wire from battery holder".
- LED Package:** A detailed diagram of an LED package with labels: "Epoxy Encapsulation", "Wire bond", "Reflective epoxy", "Semiconductor die", "Lens", "Frame", "Flat spot", "Anode", and "Cathode".
- LED Orientation:** A diagram showing the physical orientation of an LED. Labels include "Flag", "Flat", "Anode", "Cathode", "Longer Lead", "Epoxy encapsulation", "Semiconductor substrate", "Anode post", "Cathode post", and "Lead Frame".
- LED Circuit Diagram:** A diagram showing a supply voltage connected to a resistor, then to an LED. Labels include "Resistance", "Current", "Forward voltage", and "per led".
- LED Orientation Diagram:** A diagram showing the internal structure of an LED, including the "Anode post", "Cathode post", and "Lead Frame".
- LED Array Diagram:** A diagram showing an array of LEDs connected to a power source. Labels include "AT86RS1", "LED1", "LED2", "LED3", and "EngineeredGarage".
- LED Array Photos:** Two photos showing the physical LED array circuit board.

