CIT

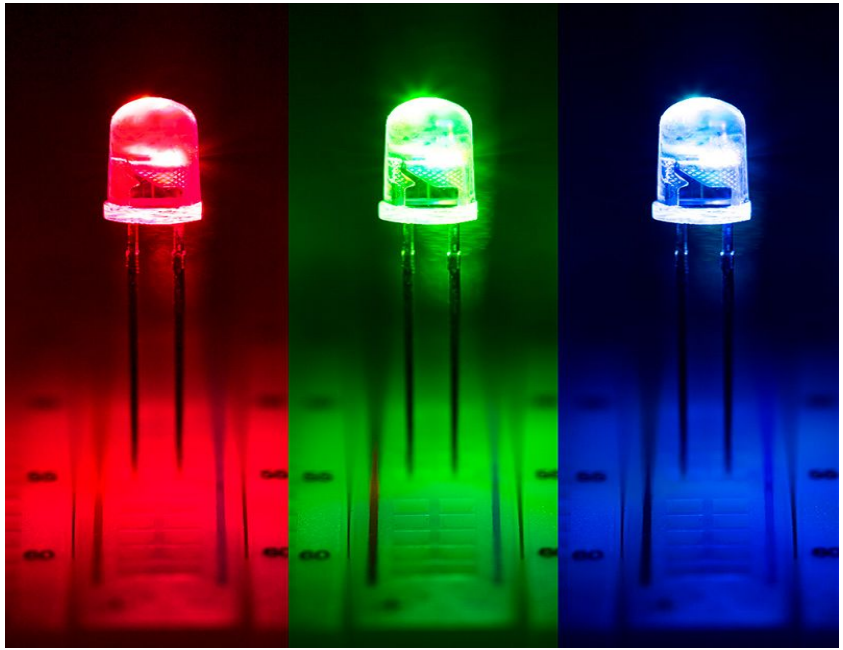
Children In Technology

What's so interesting today?

- LED
- Resistor(Color Coding)
- Capacitor
- LDR
- Breadboarding

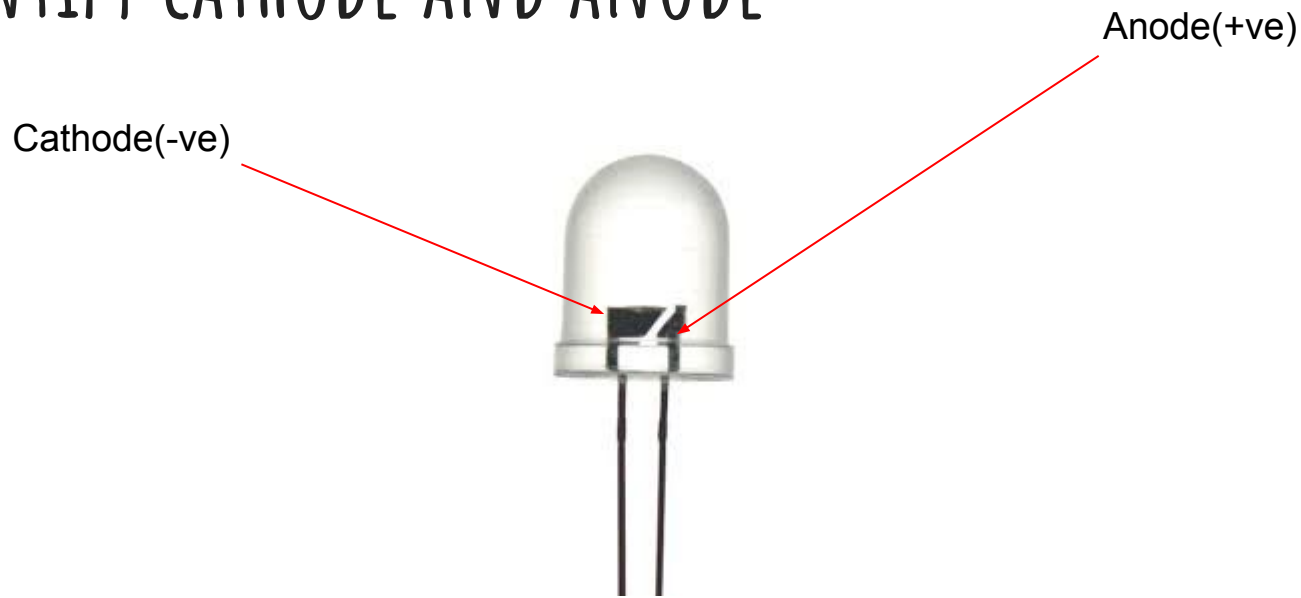
LED

Light Emitting Diodes



Uses of Led:-

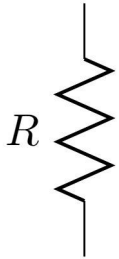
Identify cathode and anode



RESISTORS

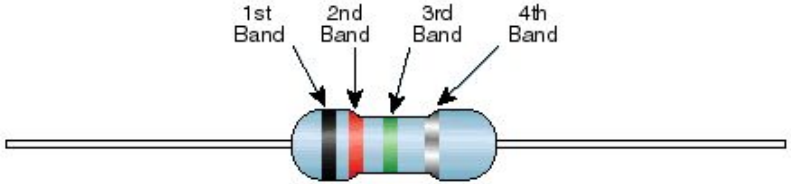
- Opposes the flow of current
- Unit : Ohm (named after George Simon Ohm)

- Symbol:



Resistor Color coding

Standard EIA Color Code Table **4 Band**: ±2%, ±5%, and ±10%

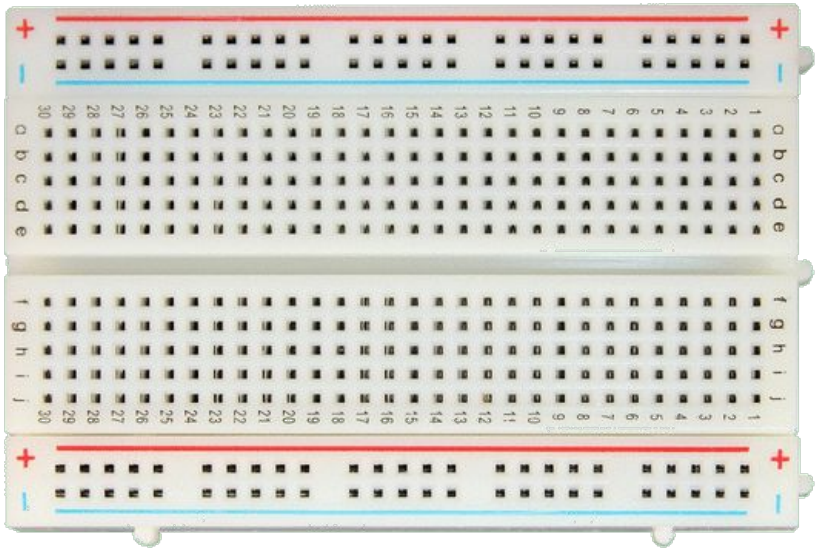


Color	1st Band (1st figure)	2nd Band (2nd figure)	3rd Band (multiplier)	4th Band (tolerance)
Black	0	0	10^0	
Brown	1	1	10^1	
Red	2	2	10^2	±2%
Orange	3	3	10^3	
Yellow	4	4	10^4	
Green	5	5	10^5	
Blue	6	6	10^6	
Violet	7	7	10^7	
Gray	8	8	10^8	
White	9	9	10^9	
Gold			10^{-1}	±5%
Silver			10^{-2}	±10%

Chart Provided By XICON

Breadboarding

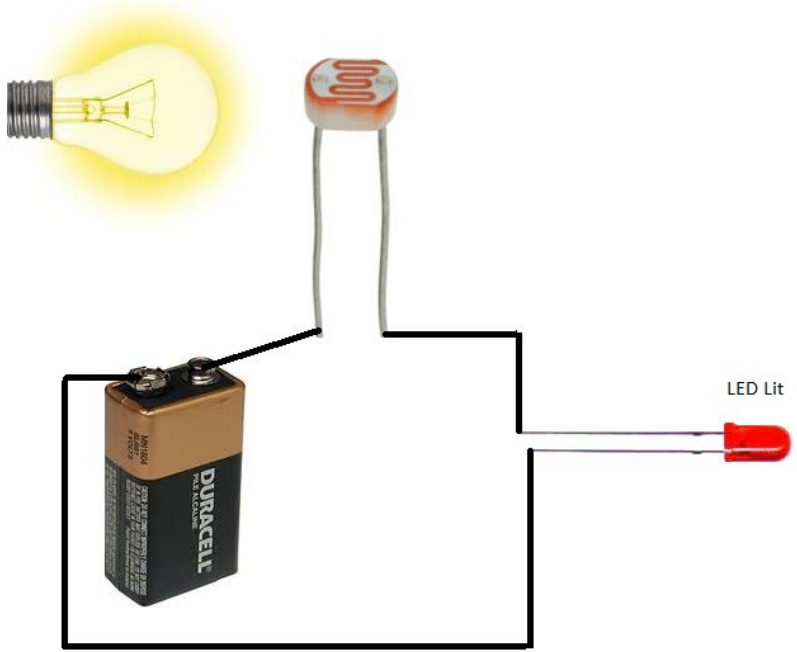
- Used for circuit modelling



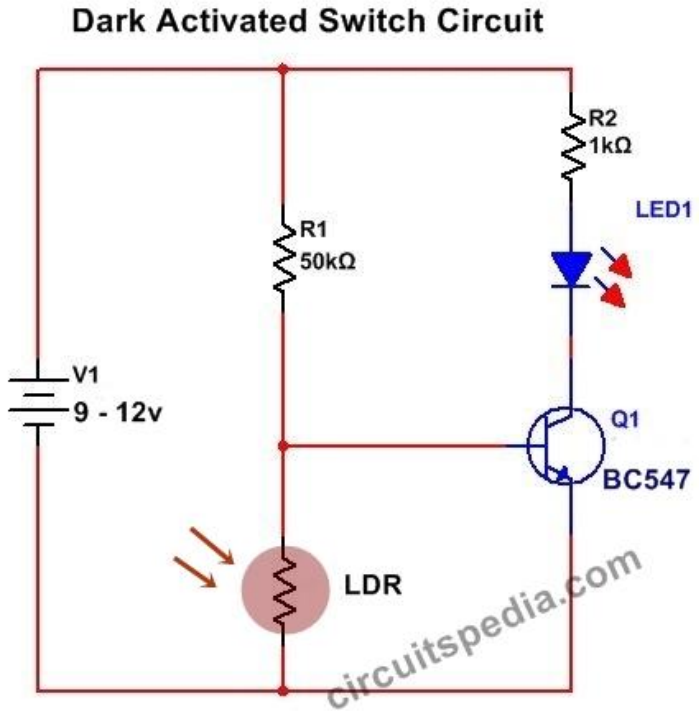
LDR

- Full Form : Light Dependent Resistor
- Also called ‘Photo Resistors’ or ‘Photo Conductive Cells’
- Resistance decreases with increasing light intensity
- In dark: in megaohms (1000*1000*ohm)
- In light: in few hundred ohms

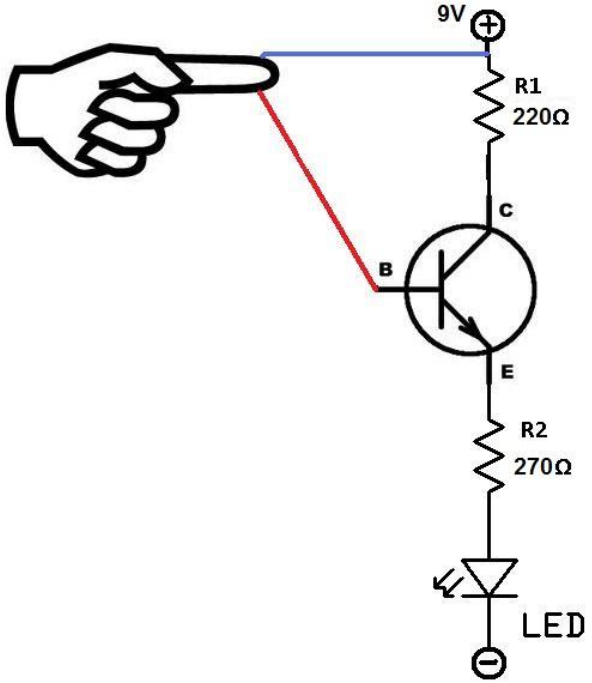
Working of LDR



LDR darkness Detection circuit



Touch sensor circuit



Any Questions?

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THANK YOU !