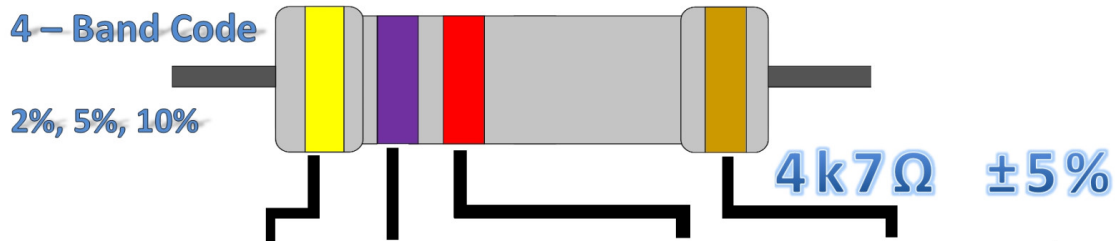
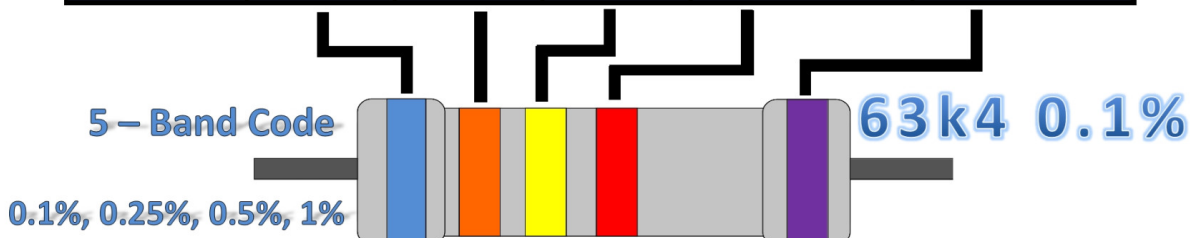


Identifying components

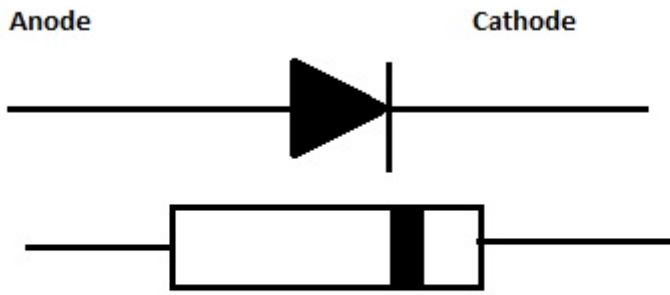
Resistors



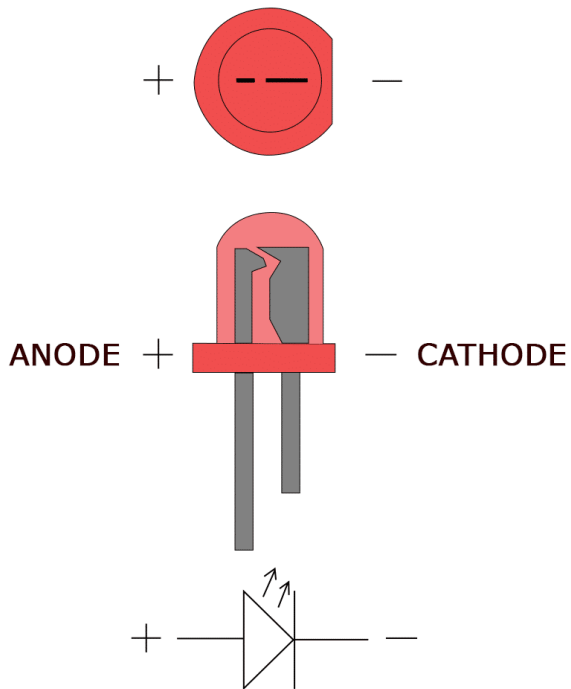
Color	1 st Band	2 nd Band	3 rd Band	Multiplier	Tolerance
Black	0	0	0	1Ω	
Brown	1	1	1	10Ω	± 1%
Red	2	2	2	100Ω	± 2%
Orange	3	3	3	1kΩ	
Yellow	4	4	4	10kΩ	
Green	5	5	5	100kΩ	± 0.5%
Blue	6	6	6	1MΩ	± 0.25%
Violet	7	7	7	10 MΩ	± 0.1%
Grey	8	8	8		± 0.05%
White	9	9	9		
Gold				0.1Ω	± 5%
Silver				0.01Ω	± 10%



Diode

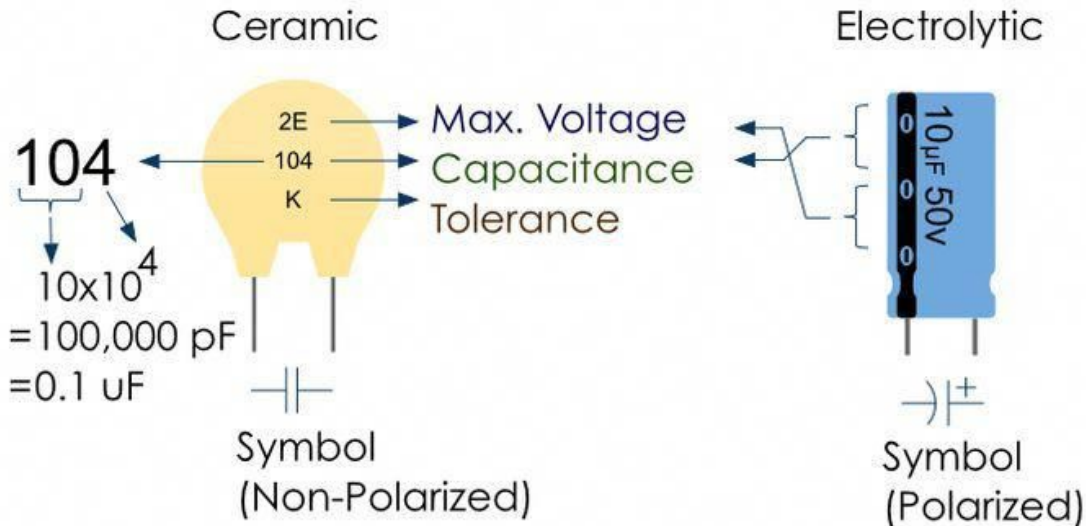


LED



Capacitors

Capacitor Cheat Sheet









Capacitance Conversion Values		
Microfarads (μF)	Nanofarads (nF)	Picofarads (pF)
0.000001 μF	↔ 0.001 nF	↔ 1 pF
0.00001 μF	↔ 0.01 nF	↔ 10 pF
0.0001 μF	↔ 0.1 nF	↔ 100 pF
0.001 μF	↔ 1 nF	↔ 1,000 pF
0.01 μF	↔ 10 nF	↔ 10,000 pF
0.1 μF	↔ 100 nF	↔ 100,000 pF
1 μF	↔ 1,000 nF	↔ 1,000,000 pF
10 μF	↔ 10,000 nF	↔ 10,000,000 pF
100 μF	↔ 100,000 nF	↔ 100,000,000 pF

Tolerance	
Code	Percentage
B	± 0.1 pF
C	±0.25 pF
D	±0.5 pF
F	±1%
G	±2%
H	±3%
J	±5%
K	±10%
M	±20%
Z	+80%, -20%

Max. Voltage	
Code	Max. Voltage
1H	50V
2A	100V
2T	150V
2D	200V
2E	250V
2G	400V
2J	630V

Resistor Cheat Sheet by Lennart Rolland, (<http://devolrobot.blogspot.no/search/label/cheat%20sheet>)

Cables

<i>Function</i>	<i>IEC Code for most of European Union</i>
Three Phase Line (L1)	
Three Phase Line (L2)	
Three Phase Line (L3)	
Neutral (N)	
Protective Earth or Ground (PE)	
Single Phase Line	

Revision #3

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