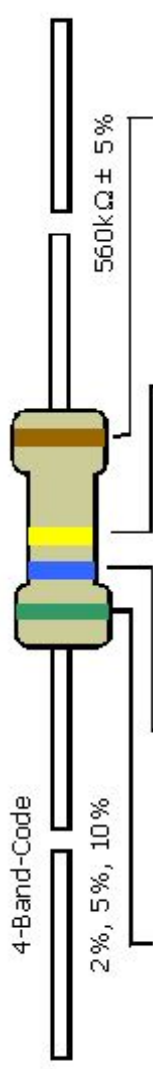


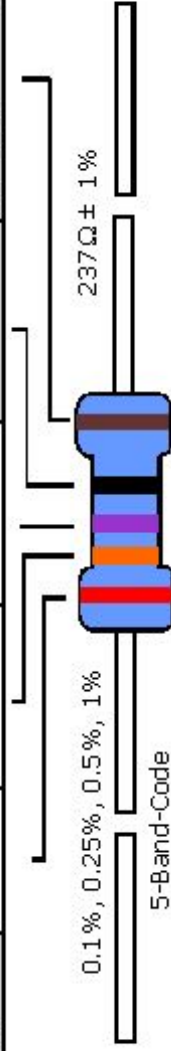
Component	Marking	Units
Resistor	R1 [R1]	Ohm (Ω , K Ω , or K)
Capacitor	C1 [C1]	Farad μ F or mF
Diode	D1 [D1] LED1	
Inductor	L1 [L1]	Henry (μ H or mH)
Transistor (BJT)	Q1 [Q1]	
Integrated Circuit (IC)	IC1 [IC1] U1 [U1]	
Crystal	Y1 [Y1]	Hertz (Hz)
Transformer	T1 [T1]	
Component	Label	Value
Resistor	2.2K 2K2	2,200 Ω
Power Supply	3V3	3.3v
	Vcc	Use the spec sheet



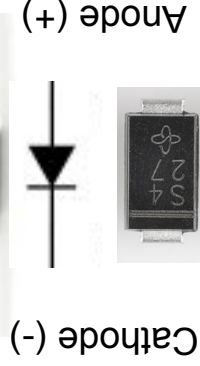
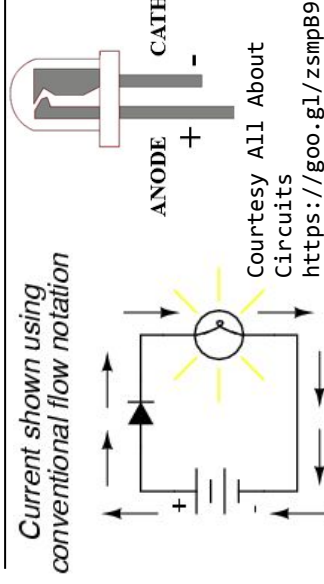
Component drawing
courtesy SparkFun.



COLOR	1st BAND	2nd BAND	3rd 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	10MΩ	± 0.10%
Grey	8	8	8		± 0.05%
White	9	9	9		
Gold				0.1	± 5%
Silver				0.01	± 10%



Courtesy <http://electtechnician.blogspot.com/2010/09/resistor-color-code.html>



tera (T) 1,000,000,000,000
giga (G) 1,000,000,000
mega (M) 1,000,000
kilo (k) 1,000
hecto (h) 100
deca (da) 10

SI Prefixes
Multiples & Sub-multiples

plainphysics.com

deci (d) 0.1
centi (c) 0.01
milli (m) 0.001
micro (μ) 0.000 001
nano (n) 0.000 000 001
pico (p) 0.000 000 000 001

Courtesy

<https://plainphysics.com/category/ordinary-physics/mechanics/si-units>

Identifying Ceramic, Non-polarized Capacitors

$$104 = 10 \times 10^4$$

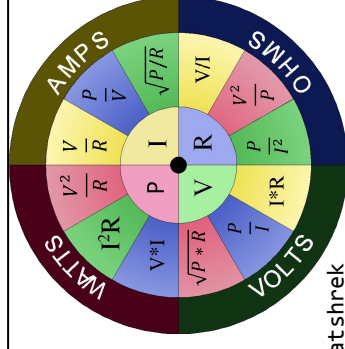
Copy first 2 digits

Suffix with 4 zeros

10 0000 pf

Courtesy

<https://learn.sparkfun.com/tutorials/capacitor-kit-identification-guide>



Courtesy <https://imgur.com/user/fatshrekk>