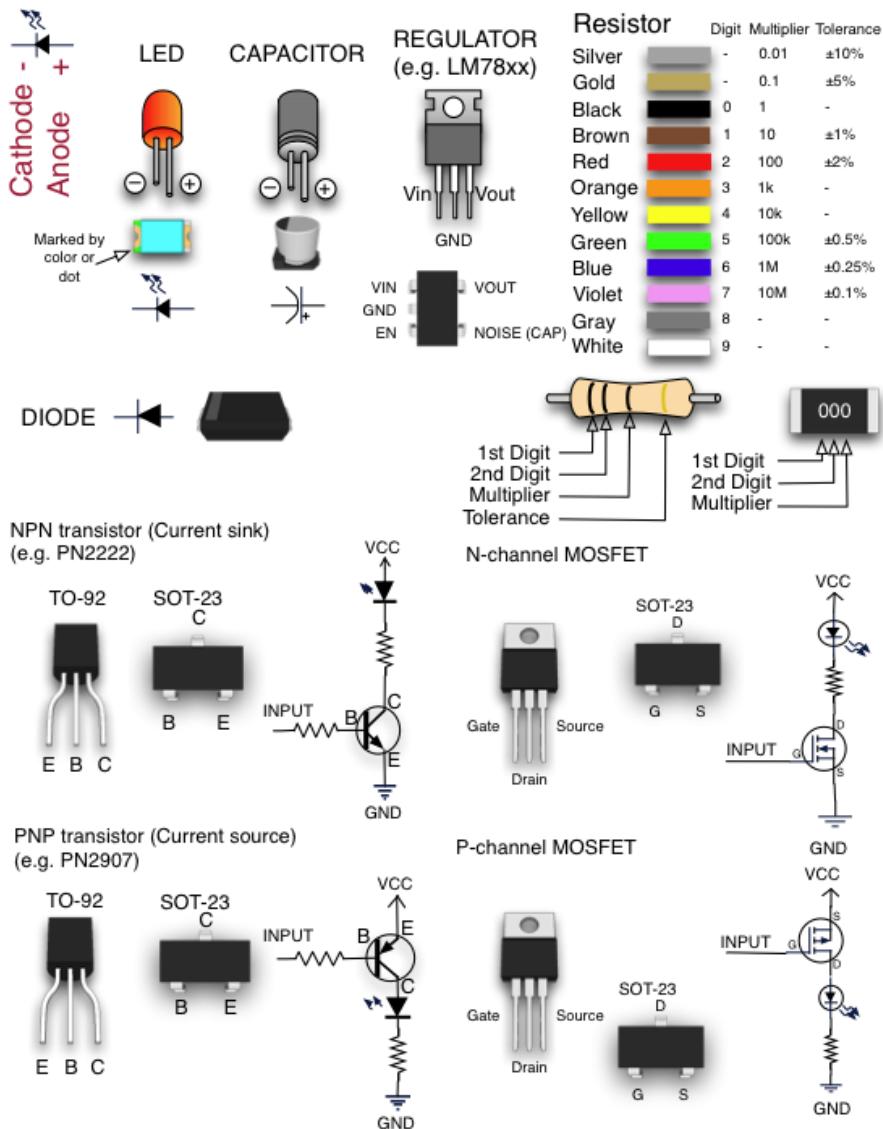


$$\frac{1000}{50} = 20 \quad \frac{1000}{40} = 25 \quad v = L \frac{di}{dt} \quad Li = NBA \quad L = N^2 A_L \quad \Delta I = 0.4 \cdot I_{average}$$

Buck	Boost	BuckBoost	Flyback
$V_{out} = dV_{in}$	$V_{out} = V_{in} \frac{1}{1-d}$	$V_{out} = -V_{in} \frac{d}{1-d}$	$V_{out} = V_{in} \cdot \frac{N_s}{N_p} \cdot \frac{d}{1-d}$



**Ceramic Capacitor**

104 → Max. Voltage  
104 → Capacitance  
K → Tolerance

$10 \times 10^4 = 100,000 \text{ pF} = 0.1 \mu\text{F}$

Symbol (Non-Polarized)

Max. Operating Voltage		Code	Percentage
Code	Max. Voltage		
1H	50V	B	± 0.1 pF
2A	100V	C	± 0.25 pF
2T	150V	D	± 0.5 pF
2D	200V	F	± 1%
2E	250V	G	± 2%
2G	400V	H	± 3%
2J	630V	J	± 5%
		K	± 10%
		M	± 20%
		Z	+80%, -20%