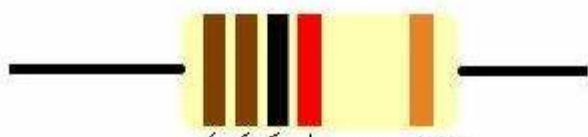


1) Direnc Okuma

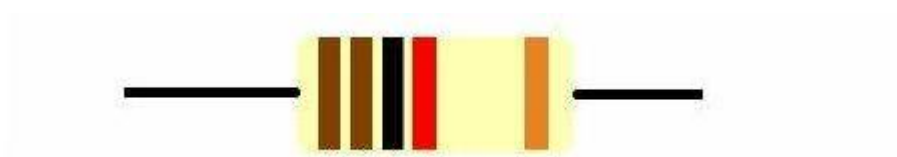


	Digit		Multiplier		Tolerance
Black	0			1	
Brown	1			10	1%
Red	2			100	2%
Orange	3			1000	
Yellow	4			10000	
Green	5			100000	
Blue	6			1000000	
Violet	7				
Grey	8		Gold	0.1	Gold 5%
White	9		Silver	0.01	Silver 10%

Dirençler 3 ya da 4 renkli olur, okunma şekli de şu şekilde;

4 Renkli ;

Digit1 – Digit2 – Digit3 – Digit Carpan - Tolerans



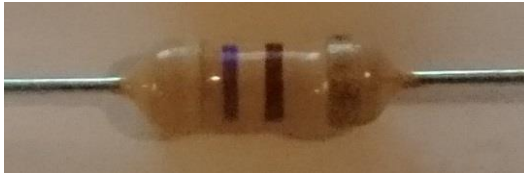
3 Renkli ;

Digit1 – Digit2 – Digit Carpan – Tolerans



2) Direncler

a. 470 Ohm



Sari – **Mor** – **Kahverengi** – Altin

4 – 7 – 1 Tolerans: %5

$$47 \cdot 10 = 470$$

b. 1K Ohm



Kahverengi – **Siyah** – **Kirmizi** – Altin

1 – 0 – 2 Tolerans: %5

$$10 \cdot 100 = 1000 = 1K$$

c. 2.2K Ohm



Kirmizi – **Kirmizi** – **Kirmizi** – Altin

2 – 2 – 2 Tolerans: %5

$$22 \cdot 100 = 2200 = 2.2K$$

d. 10K Ohm

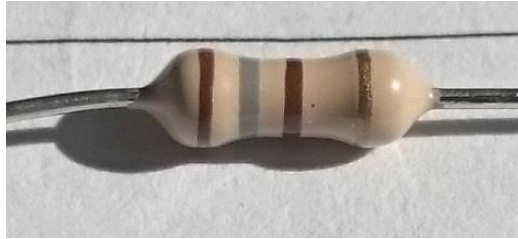


Kahverengi – **Siyah** – **Turuncu** – Altin

1 – 0 – 3 Tolerans: %5

$$10 \cdot 1000 = 10000 = 10K$$

e. 180 Ohm



Kahverengi – **Gri** – **Kirmizi** – Altın

1 – 8 – 1 Tolerans: %5

$$18 \cdot 10 = 180$$

f. 22K Ohm



Kirmizi – **Kirmizi** – **Turuncu** – Altın

2 – 2 – 3 Tolerans: %5

$$22 \cdot 1000 = 22,000 = 22K$$

g. 1M Ohm



Kahverengi – **Siyah** – **Yesil** – Altın

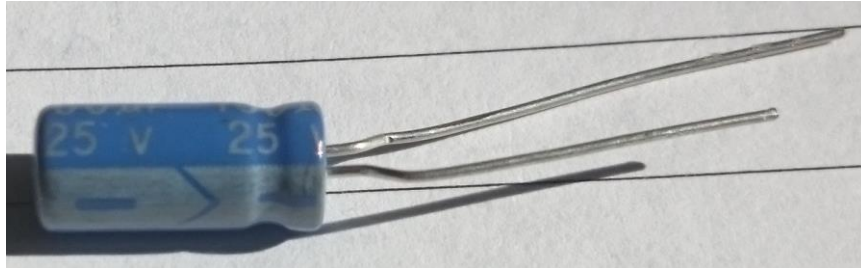
1 – 0 – 5 Tolerans: %5

$$10 \cdot 100,000 = 1,000,000 = 1M$$

3) Kapasitorler

a. Polarizasyon Sembolu

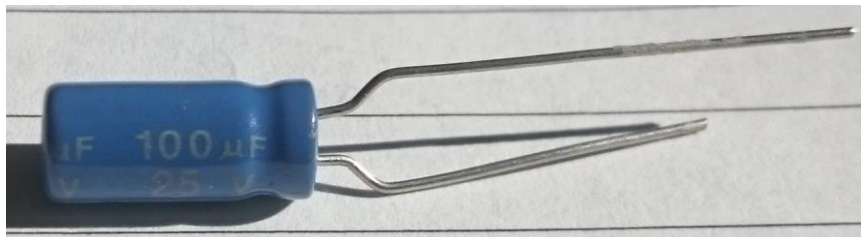
Aşagıda eksi sembolu ve ok isareti ile – kutup gosterilmektedir.



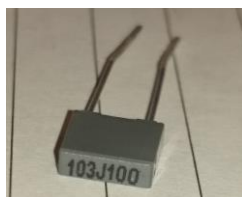
b. 10 μ F 25 V (Polarize)



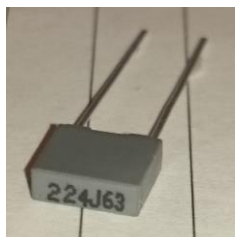
c. 100 μ F 25 V (Polarize)



d. 100 nF 100 V 103J100



e. 220 nF 63 V 224H63

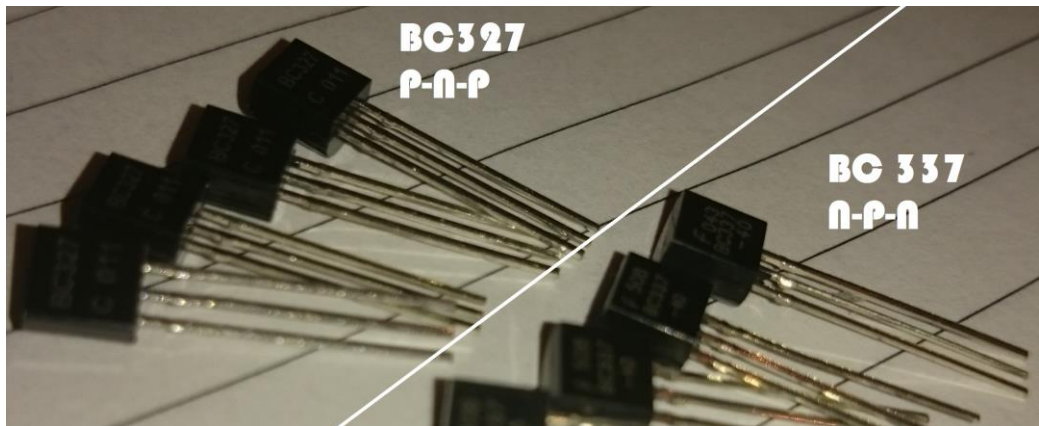


f. 100 nF Seramik



4) Transistorler

a. BC337 NPN & BC327 PNP (Ya da BC556 PNP)



5) Lojik Kapilar (Logic Gates)

a. AND

i. 74HC08

M74HCT08B1



ITU-CON : Circuit Elements

b. OR

i. 74HC32

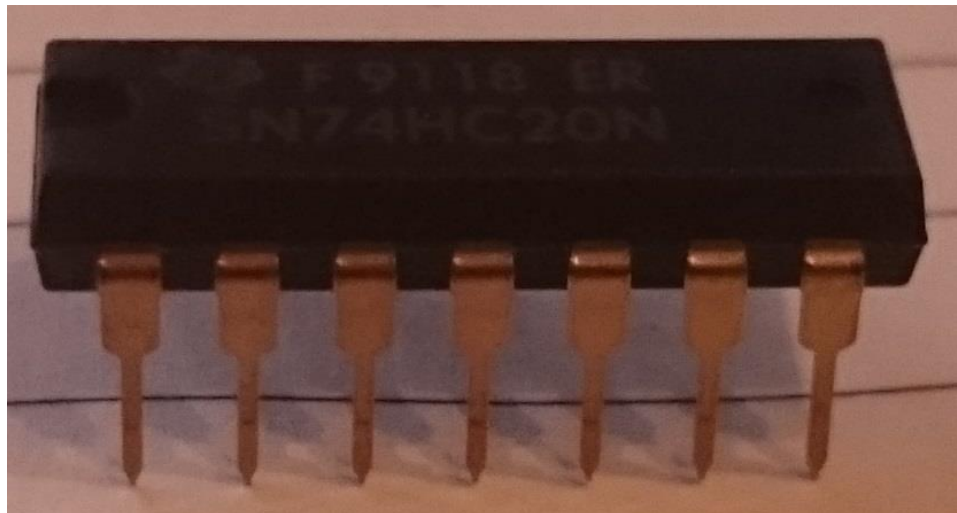
SN74HC32N



c. NAND

i. 74HC20

SN74HC20N

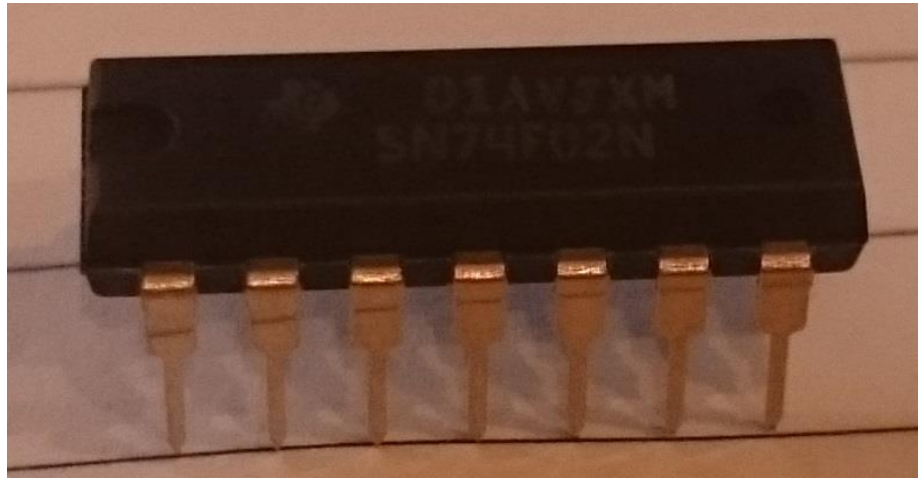


ITU-CON : Circuit Elements

d. NOR

i. 74HC02

SN74F02N



e. NOT

i. 74HC04

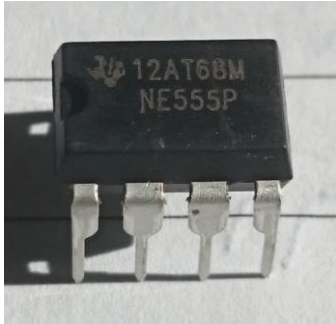
SN74HC04N



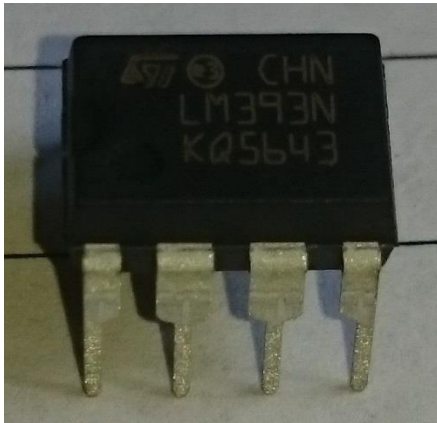
6) Tımler Devreleri

a. Tımler

LM555



b. LM393

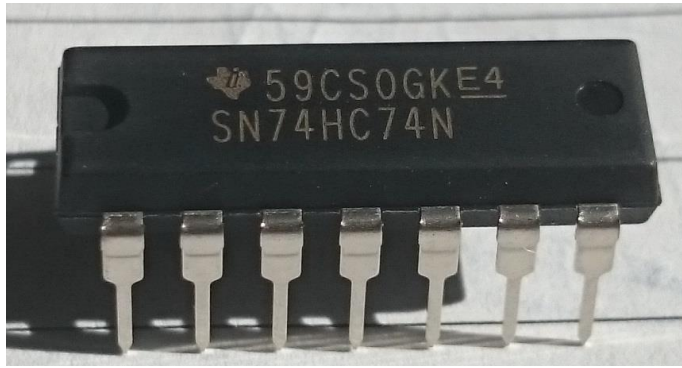


c. LM358



ITU-CON : Circuit Elements

d. 74HC74 Dual D Type Flip-Flop



e. 4017 COUNTER
HCF4017BE



7) Güç Kaynakları

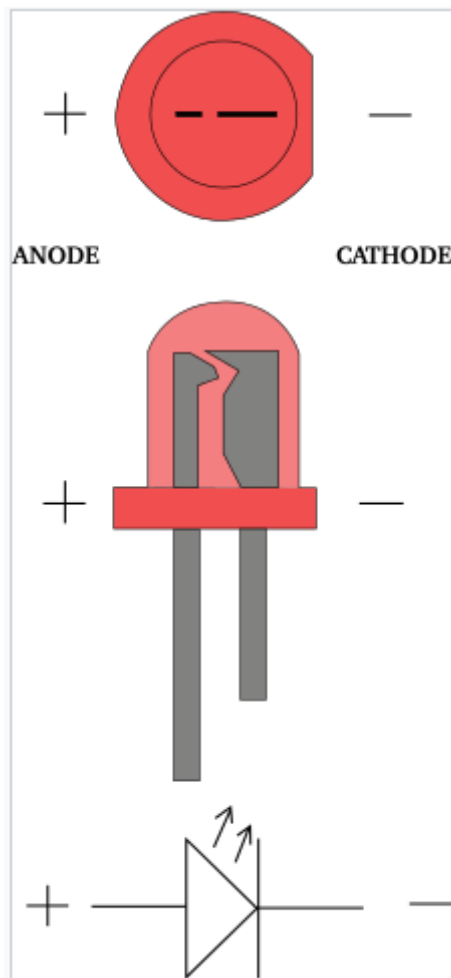
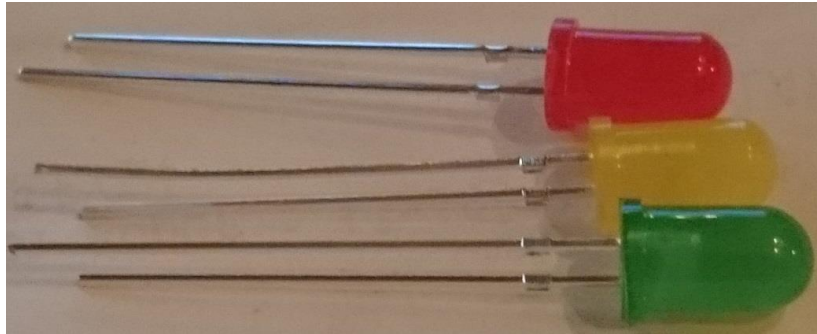
a. 5V 1A



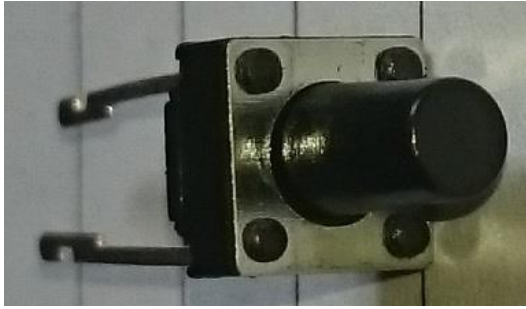
b. x

8) Diger

a. LED'ler



b. Buton



c. x