

Hesaplar

$$\frac{1}{R_{\text{es}}} = \frac{1}{470} + \frac{1}{220}$$

$$R_{\text{es}} = 149,855 \text{ ohm}$$

$$V = I \cdot R$$

$$5 = I \cdot 149,855$$

$$I = 33,365 \text{ mA}$$

$$P = V \cdot I_{\text{ölk}} \rightarrow P = 5 \cdot 33,4 \quad P = 167 \text{ mW}$$

$$\frac{1}{R_{\text{es}}} = \frac{1}{470} + \frac{1}{1000}$$

$$R_{\text{es}} = 180,327 \text{ ohm}$$

$$V = I \cdot R$$

$$5 = I \cdot 180,327$$

$$I = 27,727 \text{ mA}$$

$$P = V \cdot I_{\text{ölk}}$$

$$P = 5 \cdot 27,7$$

$$P = 138,5 \text{ mW}$$

$$\frac{1}{R_{\text{es}}} = \frac{1}{470} + \frac{1}{220} + \frac{1}{1000}$$

$$R_{\text{es}} = 130,325 \text{ ohm}$$

$$V = I \cdot R$$

$$5 = I \cdot 130,325$$

$$I = 38,365 \text{ mA}$$

$$P = V \cdot I_{\text{ölk}}$$

$$P = 5 \cdot 38,4$$

$$P = 192 \text{ mW}$$

$$R_{\text{es}} = 470 + 220$$

$$R_{\text{es}} = 690 \text{ ohm}$$

$$V = I \cdot R$$

$$5 = I \cdot 690$$

$$I = 7,246 \text{ mA}$$

$$P = V \cdot I_{\text{ölk}}$$

$$P = 5 \cdot 7,25$$

$$P = 36,25 \text{ mW}$$

$$R_{\text{es}} = 220 + 1000$$

$$R_{\text{es}} = 1220 \text{ ohm}$$

$$V = I \cdot R$$

$$5 = I \cdot 1220$$

$$I = 4,098 \text{ mA}$$

$$P = V \cdot I_{\text{ölk}}$$

$$P = 5 \cdot 4,10$$

$$P = 20,5 \text{ mW}$$

$$R_{\text{es}} = 220 + 470 + 1000$$

$$R_{\text{es}} = 1690 \text{ ohm}$$

$$V = I \cdot R$$

$$5 = I \cdot 1690$$

$$I = 2,958 \text{ mA}$$

$$P = V \cdot I_{\text{ölk}}$$

$$P = 5 \cdot 2,96$$

$$P = 14,8 \text{ mW}$$

Ölçümler

Paralel	V (V)	I ₁ (mA)	I ₂ (mA)	I ₃ (mA)	I _{ölk} (mA)	I _{hesap} (mA)	R _{es} (Ω) (V/I _{ölk})	R _{es} (Ω) (hesap)	P(mW) (V * I _{ölk})
R ₁ R ₂	5	22,7	10,6	/	33,4	33,365	149,700	149,855	167
R ₁ R ₃	5	22,7	/	5	27,7	27,727	180,505	180,327	138
R ₁ R ₂ R ₃	5	22,7	10,6	5	38,4	38,365	130,208	130,325	192

Seri	V (V)	V ₁ (V)	V ₂ (V)	V ₃ (V)	I _{ölk} (mA)	I _{hesap} (mA)	R _{es} (Ω) (V/I _{ölk})	R _{es} (Ω) (hesap)	P(mW) (V * I _{ölk})
R ₁ R ₂	5	1,59	3,41	/	7,25	7,246	689,65	690	36,25
R ₁ R ₃	5	0,90	/	4,10	4,10	4,098	1219,51	1220	20,5
R ₁ R ₂ R ₃	5	0,65	1,39	2,96	2,96	2,958	1689,18	1690	14,8