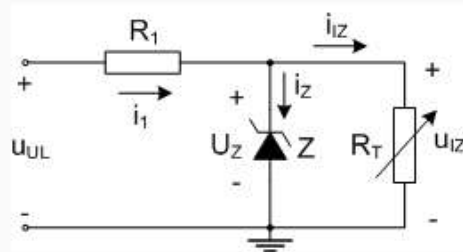


1

Marks: 1/1

Na izlazu stabilizatora, prikazanog slikom, izmjeren je napon 5 V. Ako na ulaz dovedeno napon između 12 V i 16 V moramo koristiti otpornik R_T u granicama od 150 Ω do 330 Ω da bi stabilizator radio ispravno. Otpor trošila je $R_T \geq 470 \Omega$. Odrediti parametre Zenerove diode.



Odaberite jedan odgovor.

- ☐ a.
 $U_Z = 5,8 \text{ V}$, $P_{Z_{max}} = 394,4 \text{ mW}$ i $I_{Z_{min}} = 6,4475 \text{ mA}$
✗
- ☒ b.
 $U_Z = 5 \text{ V}$, $P_{Z_{max}} = 366,67 \text{ mW}$ i $I_{Z_{min}} = 10,574 \text{ mA}$
✓
- ☐ c.
 $U_Z = 5 \text{ V}$, $P_{Z_{max}} = 106,06 \text{ mW}$ i $I_{Z_{min}} = 10,574 \text{ mA}$
✗
- ☐ d.
 $U_Z = 5 \text{ V}$, $P_{Z_{max}} = 366,67 \text{ mW}$ i $I_{Z_{min}} = 62,695 \text{ mA}$

☐ e.

$$U_Z = 5,8 \text{ V}, P_{Z_{max}} = 108,97 \text{ mW} \text{ i } I_{Z_{min}} = 55,66 \text{ mA}$$

x

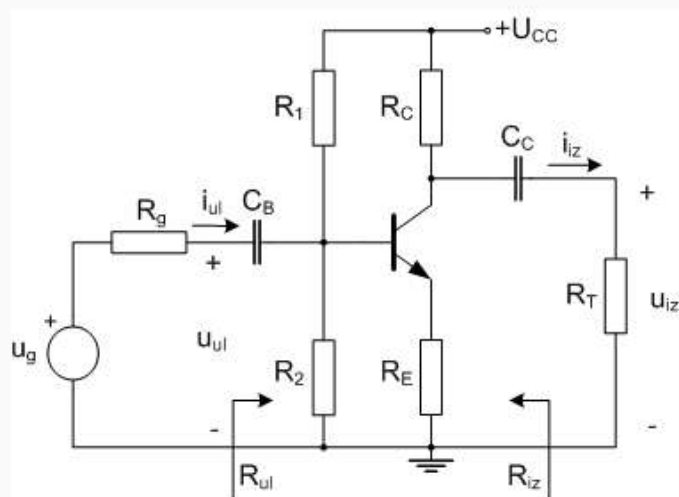
Točno

Marks for this submission: 1/1.

2

Marks: 1/1

U pojačalu sa slike zadano je: $U_{CC} = 12 \text{ V}$, $R_g = 500 \Omega$, $R_1 = 220 \text{ k}\Omega$, $R_2 = 33 \text{ k}\Omega$, $R_C = 6,8 \text{ k}\Omega$, $R_T = 5,6 \text{ k}\Omega$ i $R_E = 1000 \Omega$. Parametri *npn* bipolarnog tranzistora su $\beta \approx h_{fe} = 100$, $U_Y = 0,7 \text{ V}$. Naponski ekvivalent temperature $U_T = 25 \text{ mV}$. Odrediti naponsko pojačanje $A_V = u_{iz}/u_{ul}$ i izlazni otpor R_{iz} pojačala.



Odaberite jedan
odgovor.

☐ a.

odgovor.

$A_V = -2,3747$, $R_{iZ} = 6,8 \text{ k}\Omega$

✗

☒

b.

$A_V = -2,9318$, $R_{iZ} = 6,8 \text{ k}\Omega$

✓

☐

c.

$A_V = -2,9318$, $R_{iZ} = 5,508 \text{ k}\Omega$

✗

☐

d.

$A_V = -5,3065$, $R_{iZ} = 7,48 \text{ k}\Omega$

✗

☐

e.

$A_V = -2,3747$, $R_{iZ} = 5,508 \text{ k}\Omega$

✗

Točno

Marks for this submission: 1/1.

Finish review