



Q1, Q13 : IRF610

Q2, Q10 : KSA992

Q4, Q14 : IRF9610

Q3, Q7 : KSC1845

Q5 : FQP3P20

Q6 : FQP3N30

Q8 : 2N7000 (Not TA) or ZVN4206AV

Q12 : BD139

Q9, Q11 : BS250P (Diodes Inc) or ZVP2106A

Q15 : FQA46N15

Q16 : FQA36P15

L1 : 22 turns of 1mm copper insulated wire with a 8mm diameter tube.  
Will give a 22x10mm coil.

U1 : OPA1641 or OPA1611

D1, D4 : LED RED 2V

D2, D3 : 1N5248B

D5, Q6 : 1N5245

C15, C16 : The best choice is Vishay BC MAL204858222E3.

C7 : Use good MKP capacitor (MKP1F041005I00JYSD).

C17 : Use good MKP capacitor (FKP3C031004C00J5SD or MKP1F031004B00KI00).

C6 : Use bipolar capacitor if possible (UES1C101MPM1TD).

C1 and C10 : Use good CDE Mica or Polystyrene capacitor.



Q17 a QUAD405 audiophile approach

Modified by Stef for the Q17-Mini project

by eng. Tiberiu Vicol

Sheet: /

File: Q17-Mini.kicad\_sch

**Title: Q17-Mini Amplifier**

Size: A4 Date: 2021-11-20

KiCad E.D.A. kicad (6.0.0-rc1-46-g1d2fd6d271)

**Rev: 1.0.5**

Id: 1/1