

BOM for DIYaudio F5 Turbo

FRONT END:

R1 = 1Kohm 0.6W

R2 = 47.5Kohm 0.6W

R3, R4 = 10ohm 3W

R5, R6 = 1Kohm 0.6W

R7, R8, R9, R10 = 220ohm 3W

R25, R26 = 4.75Kohm-10Kohm (may be differet value, see formula) only use when cascoding

R27, R28 = 4.75Kohm (may be differet value, see formula) only use when cascoding

R29, R30 = 475ohm 0.6W only use when cascoding

C1, C2 = 10uF 100V

C5, C6 = 10uF 100V (only needed when cascoding)

Q1,(Q3) = 2SK170BL

Q2,(Q4) = 2SJ74BL

Q7 = 2SC4793 only use when cascoding. Otherwise short C-E

Q8 = 2SA1837 only use when cascoding. Otherwise short C-E

P1, P2 = 5Kohm bourns multiturn pot

P3 = 200ohm bourns multiturn pot

4 pc 2 pole terminal block 5.08mm

P CHANNEL BOARD:

R17, R18, R19, R20 = 1ohm 3W

R13, R14 = 47.5ohm 0.6W

R11 = 2.2Kohm (use only on 1 P ch board pr channel)

TH1 = 4.7Kohm NTC (use only on 1 P ch board pr channel)

C1 = 10uF 100V

C3= 1nF (optional)

D1, D2 = MUR3020W

Q3, Q4 = IRFP9240, FQA12P20 or equal.

N CHANNEL BOARD:

R21, R22, R23, R24 = 1ohm 3W

R15, R16 = 47.5ohm 0.6W

R12 = 2.2Kohm (use only on 1 N ch board pr channel)

TH1 = 4.7Kohm NTC (use only on 1 N ch board pr channel)

C2 = 10uF 100V

C4= 1nF (optional)

D1, D2 = MUR3020W

Q5, Q6 = IRFP240, FQA19N20 or equal.

CASCODE FORMULA: rail voltage / (R26+R28) * R28 = cascode voltage

ex: 50V rails / (10Kohm+4,75Kohm) * 4.75Kohm = 16.1V