

Datasheet

Particulars :

EL34 high capacity audio frequency output pentode tube's anticathode limit dissipation power is 25W. In audio frequency amplifier, if single tube is used to amplify the power of A1, the output power is larger than 10W; if two tubes are used to amplify the power of AB1 series, the output power will be larger than 35W. EL34 is the same with 6CA7, and can be exchanged each other.

heater heating

UH.....6.3 V
IH.....1.5 A

limit rating

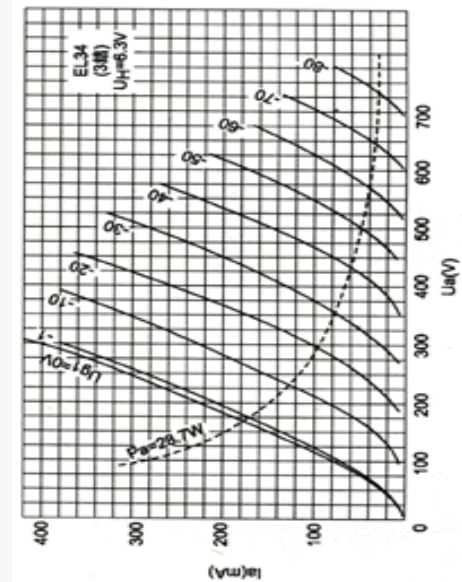
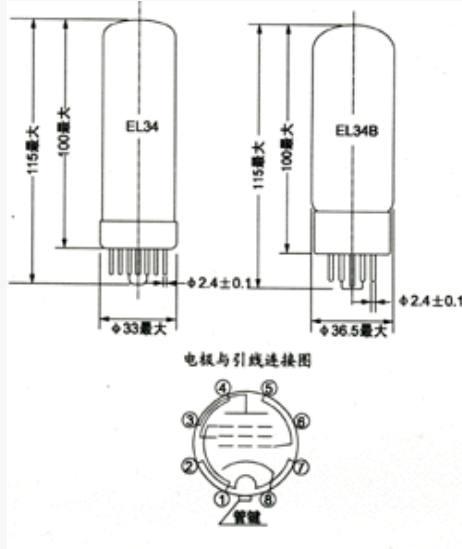
plate voltage..... 800 V
second grid voltage..... 500 V
first grid voltage..... -100 V
plate dissipation power..... 25 W
second grid dissipation power..... 8 W
cathode current.....150 mA
first grid resistance
when it is self-partial voltage.....0.7 MΩ
when it is fixup partial voltag.....0.5 MΩ
heatervoltage between cathodes.....±100 V
temperature of glass crust.....250 °C

capacitance between poles

input capacitance..... 15.2 PF
output capacitance..... 8.4 PF
transroute capacitance..... 1.1 PF
first grid heater capacitance..... 1.0 PF
heater shade capacitance between poles... 10 PF

static state parameter

Ua..... 250 V
Ug2.....250 V
Ug3..... 0 V
-Ug1.....12.2 V
Ia..... 100 mA
Gm..... 11 mA/V
ri..... 15 kΩ
μg1-g2.....11



commend working state (reference value)

single tube A1 amplify (fixuppartial voltage)

Ua(b) 265 265 V
Ua.....250 250 V
Ug2..... Rg2=2k Rg2=0
Ug3.....0 0 V
-Ug1..... 14.5 13.5 V
Ia(0)70 100 mA

Ig2(0) 10 14.9 mA
 Gm..... 9 11 mA/V
 ri.....18 15 kΩ
 RL..... 3 2 kΩ
 Pout..... 8 11 W
 Dtot.....10 10 %

driving B1 series amplify (fixuppartial voltage)

Ua.....375 400 V
 ▲Rg2..... 600 800 Ω
 Ug3..... 0 0 V
 -Ug1..... 33 36 V
 Ia(0)2×30 2×30 mA
 Ia(maxsig)2×107.5 2×110.5 mA
 Ig2(0)2×4.7 2×4.5 mA
 Ig2(maxsig)2×23.5 2×23 mA
 RI(a-a)3.5 3.5 kΩ
 ü(g1-g1)(r.M.S) 46.7 50 V
 Pout.....48 54 W
 Dtot.....2.8 1.6 %

▲ Rg2 is be used by two tubes at the same time.

driving B1 series amplify super line connect (auto-partial voltage)

(43% tapping points)

Ua.....430 V
 Rg2..... 2×1 kΩ
 Ia(0)2×62.5 mA
 Ia(max.sig) 2×65 mA
 Ig2(0)2×10 mA
 Ig2(max.sig) 2×10.2 mA
 Rk.....2×470 Ω
 ?(g1-g1)(r.M.S)35 V
 RL(a-a) 6 kΩ
 Pout.....20 W
 Dtot..... 0.35 %