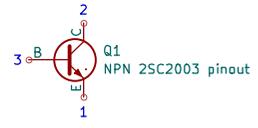


R6 needs to be found this way:
 Pin 8 is not connected to point A.
 The DC Voltage need to be dalled in to 100V measured at pin 8.
 This can be done ith a Potentiometer with a value of 220K lin.
 If the 100V is set the disconnect the Potentiometer and measure the value.
 Search for the nearest value by connecting several resistors in series or parallel.
 After exchanging the potentiometer with the set vakuue you can connect pin 8 to point A.

PL509 and PL519 have the same connections
 PL509 has arround 5W less anode dissipation
 Pins 1 – 8 grid 1
 Pins 3 – 6 grid 2 -> functions as Anode
 Pins 4 – 5 40V 300mA heaters
 Pins 2 – 7 not connected
 Top cap not connected
 Pin 9 Kathode

Resistors metaloxide 1W unless mentioned lower.

Powersupply
 For powersupply I used a 340V Tordial transformer with 300mA.
 5V powersupply for the 5AR4 / GZ34 and 40V powersupply for the PL 519 heaters.
 For rectifying I used the 5AR4 / GZ34 and standard circuitry with choke and capacitors.
 Depending on the type of rectifier tube you use, be aware that there will be voltage loss over this rectifier.
 Typical voltage for the PL519 250V + 100V (g1 to ground) = 350V as a goal.



Transistor NPN can be 2SC2003, BC 547, BC 550 etc.
 Be aware of the pin out can be different!

First stage Beta-follower	
Directly Coupled to	
Endstage PL519 with Grid 2 connected as anode	
Anode cap not connected.	
Kees Brakenhoff	
Sheet: /	
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