

Filament Ratings (See note4 and 5)

	520B-V2	520B-V3	520B-V4
Filament Voltage (AC or DC)	= 6.5 Volt	= 5.0 Volt	= 5.0V with Balanced Heater. (2x 2.5V)
Tolerance on filament voltage	5%	5%	5%
Filament Current	~ 1.5 Amp.	~ 2.0 Amp.	~2.0 Amp.

**Maximum Conditions
(Not possible simultaneously)
See also Note4.**

Plate Voltage	550Volt
Plate Current	200mA
Tube Output Power	24 Watt
Highest possible Grid to ground resistor, Single Ended.	150kOhm
Highest possible Grid to ground resistor, Push-Pull.	50kOhm

**Typical application
Recommended operating point
See also Note3.**

All bias methods are possible

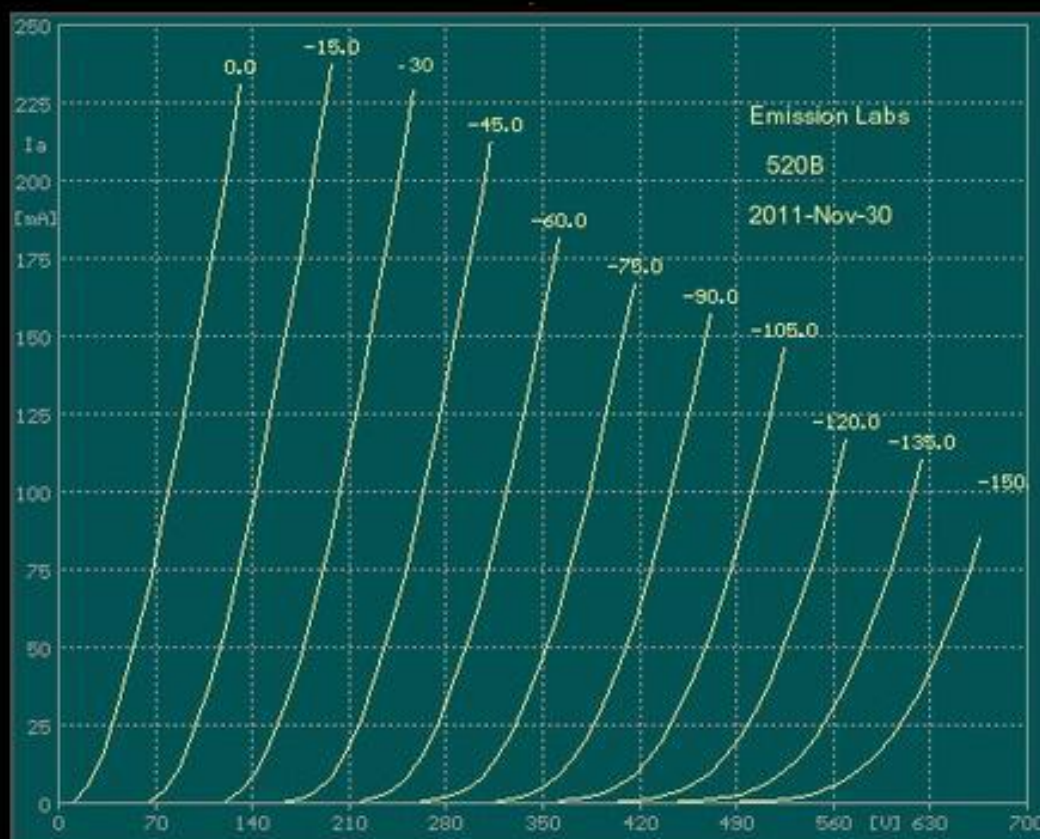
Plate Voltage	458V
Plate Dissipation	55Watt
Plate Current	120mA
Grid DC Voltage	-91Volt
Plate Impedance (Rp)	520Ohms
Unloaded Gain (mu)	6.7
Effective Gain	5.6
Tube Power Output in Class A	21.6Watt
Load Impedance (Ra)	2600 Ohm
Grid resistor to ground	Max. 100kOhm

520B Single Ended operating points
(This is just a selection from various points of the curve chart)

Plate Voltage (Against Heater)	Grid Voltage (Against Heater)	Plate Current (mA)	Plate Rp (Ohm)	Load (Ohm)	Plate Dissipation (Watt)	Power Output (Watt)	2nd harm. (dB)	Recommended Lundahl Transformer
400	-82	80	530	2800	32	13.2	30	LL1679-120mA
400	-81	100	530	2000	40	15.6	25	LL1679-120mA
400	-80	120	510	2000	48	18.7	25	LL1679-120mA
450	-95	80	580	3300	36	13.0	27	LL1620-100mA
450	-92	100	520	3600	45	14.3	31	LL1620-100mA
450	-91	110	520	3600	50	15.6	31	LL1620-100mA
450	-89	120	520	2600	54	21.5	24	LL1679-120mA
500	-106	90	620	3600	45	16.0	32	LL1620-100mA
500	-104	100	560	3600	50	17.5	32	LL1620-100mA
500	-102	110	560	2600	55	24.0	25	LL1679-120mA

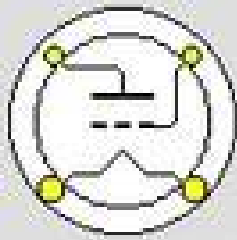
Other operating points: For operating points, not given here, you can estimate the parameters by averaging between two rows of this table.

Output Power: Is specified at the tube, so transformer loss must be subtracted. This is depending on the transformer choice and quality. Low Loss transformers have larger dimensions.



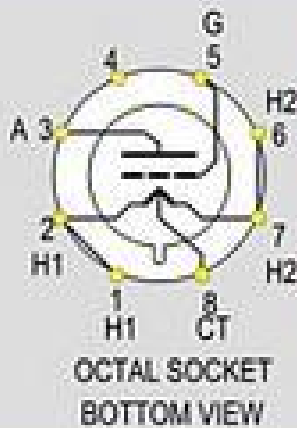
Mechanical Data

UX4 BASE CONNECTIONS (UX4)



Logo on this side
Plates parallel to this side

OCTAL BASE CONNECIONS



LOGO ON THIS SIDE
PLATES PARALLEL TO THIS SIDE

- Pin 1+2: Heater1
- Pin 6+7: Heater2
- Pin 8: Center Tap (Cathode)
- Pin3: Anode (Plate)
- Pin5: Grid

Size including Socket
(but excluding pins)

200 x 68 mm
7.5 x 2.7 Inch

Shipped weight
for double box

950 Gram