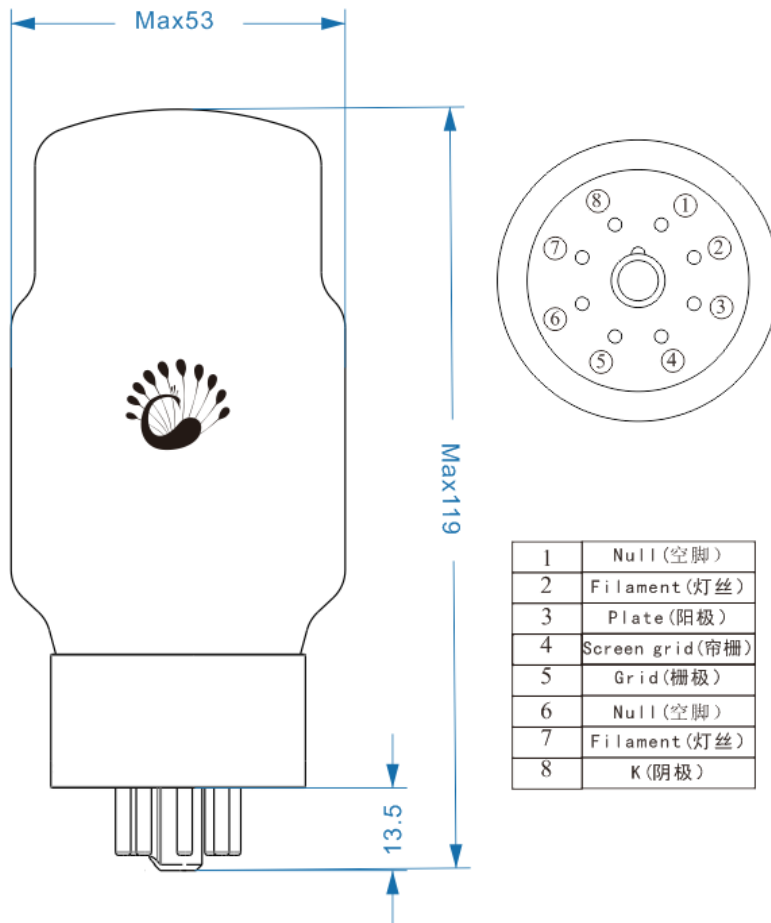


KT88

KT88 is a beam power tetrode, its anode limited dissipation power is 42W. In the audio amplifier, the power can be 100W when it is used as push-pull class AB1 with double tubes, it can also be used in electronic voltage regulator circuit. KT88 is similar with CV5220 and 6550, they can be replaced by each other.



Heater

UH..... 6.3 V

IH..... 1.6 A

Maximum Rating

----- --KT94 KT100 KT94 KT100

Ua..... 800 800 800 800 V

Ug2..... 600 600 600 600 V

Ug1.....-200 -200 -200 -200 V

Pa..... 42 45 35 40 W

Pg2..... 8 8 6 6 W

Pa+g2... 46 49 40 45 W

Ik..... 230 230 230 230 mA

Uh-k..... 200 200 250 250 V

Tbulb..... 250 250 250 250 C

Rg1

with cathode bias

--- --Pa + Pg2 ≤ 35W 0.47 MΩ

--- --Pa +Pg2 > 35W 0.27 MΩ

with fixed bias

--- ---Pa +Pg2≤35W 0.22 MΩ

--- ---Pa +Pg2> 35W 0.10 MΩ

Direct Interelectrode Capacitances

--- - -triode connection and tetrode connection

input..... 16--- -9.3 PF

output..... 12 --- -17 PF

grid to plate..... 1.2 ----7.9 P

Static parameter

tetrode connection

Ua.....250V

Ug2..... 250V

a..... 140mA

Ig2(approx)..... 3mA

-Ug1(approx).....15V

Gm..... 12mA/V

ri12KΩ

μg1-g2..... 8

triode connection

Ua.g2.....250V

Ia+g2.....143mA

-Ug1(approx)... 15V

Gm.....12mA/V

ri......670Ω

μ..... 8

Series KT88 KT94 KT100

KT88-978

Recommended Operating Conditions (reference value)

Push-pull.classAB1.cathode bias.triode connection.

Ua.g2(b).....400 485 V

Ua.g2(O).....349 422 V

Ia+g2(0).....2×76 2×94 mA

Ig+Ig2(max.sig).....2×80 2×101mA

RL(a-a).....4 4 KΩ

-Ug(approx)..... 40 50 V

Pout..... 17 31 W

Dtot 1.5 1.5 %

Pa.g2(0)..... 2×26.5 2×40W

Pa.g2(max.sig)..... 2 ×19 2×27 W

Rk.....2×525 2×525Ω

ū (g1-g1.pk) 78 114 V

Zout..... 2 1.9 KΩ

Push-pull.classAB1.cathode bias.tetrode connection.

Ua(b).....560 V

Ua(0).....521 V
 Ug2..... 300 V
 Ia(o).....2×64 mA
 Ia(max.sig).....2×73 mA
 Ig2(0).....2×1.7 mA
 Ig2(max.sig)..... 2×9 mA
 RL(a-a)..... 9 kΩ
 Rk.....2×460 Ω
 -Ug1(approx).....30 V
 Pout.....50 W
 Dtot.....3 %
 Pa(0)2×33 W
 Pa(max.sig)2×28 W
 Pa2(0)2×0.5 W
 Pg2(max.sig)2×0.7 W
 ?(g1-g1.pk)60 V

KT100

Push-full.class AB1.fixed bias.ultra-linear connection.

(40%tapping points)

U a.g2(b).....560 460 V
 Ua.g2(0).....553 453 V
 Ia+g2(0).....2x50 2x50mA
 Ia+g2(max.sig)..... 2x157 2x140mA
 RL (a-a) 4.5 4 KΩ
 -Ug1(approx)..... 75 59 V
 Pout..... 100 70 W
 Dtot2 2 %
 Pa+g2(0).....2x27.5 2x27.5W
 Pa+g2(max.sig).....2x33 2x27 W
 ū (g1-g1.pk)140 114 V
 Zout..... 7 6.5 KΩ

Push-full.class AB1.cathode bias.ultra-linear connection.

(40% tapping points)

Ua.g2(b)500 375 V
 Ua.g2(0)436 328 V
 Ia+g2(0)2×87 2×87 mA
 Ia+g2(max.sig)2×99 2×96 mA
 RL(a-a) 6 5 kΩ
 Rk.....2×600 2×400 Ω
 -Ug1(approx) 52 35 V
 Pout.....50 30 W
 Dtot..... 1.5 1.0 %
 Pa+g2(0)2×38 2×28.5 W
 Pa+g2(max.sig) 2×17 2×16 W
 ?(g1-g1.pk) 104 71 V
 Zout..... 4.8 4.5 kΩ

Push-full.class AB1.fixed bias.tetrode connection.

Ua(b)560 V

$U_a(0)$ 552 V
 U_{g2} 300 V
 $I_a(0)$ 2×60 mA
 $I_a(\text{max.sig})$ 2×145 mA
 $I_{g2}(0)$ 2×1.7 mA
 $R_L(a-a)$ 4.5 k Ω
 $-U_{g1}(\text{approx})$ 34 V
 P_{out} 100 W
 D_{tot} 2.5 %
 $P_a(0)$ 2×33 W
 $P_a(\text{max.sig})$ 2×28 W
 $P_{g2}(0)$ 2×0.5 W
 $P_{g2}(\text{max.sig})$ 2×4.5 W
 $\varphi(g1-g1.pk)$ 67 V

