

Shuguang Treasure Series Tube Specification:

Model Number: KT88-Z

Distributed by: www.grantfidelity.com**Filament Heating:**

UH	6.3 V
IH	1.6 A

Maximum Ratings:

Plate Voltage:	800 V
Second grid voltage:	600 V
First grid voltage:	-200 V
Plate power dissipation:	42 w
Second grid power dissipation:	8 w
Plate plus second grid power dissipation:	46 w
Cathode current:	230 mA
Heater voltage between cathodes:	200 V
Temperature of glass crust:	250 C

First grid resistance

Self-biasing:

Pa + Pg2 <= 35w	0.47 Mohm
Pa+ Pg2 > 35w	0.27 Mohm

Fixed biasing:

Pa + Pg2 <= 35w	0.22 Mohm
Pa + Pg2 > 35w	0.10 Mohm

Capacitance

	Tetrode	Triode
Input capacitance	16	9.3 pF
Output capacitance	12	17 pF
Muller capacitance	1.2	7.9 pF

DC Parameters:

Tetrode configuration:

Ua	250 V
Ug2	250 V
Ia	140 mA
Ig2 (approx)	3 mA
-Ug1 (approx)	15 V
Gm	12 mA/V
ri	12 Kohm
Ug1-g2	8

Triode configuration:

Ua.g2	250 V
Ia+g2	143 mA
-Ug1 (approx)	15 V
Gm	12 mA/V
ri	670 ohm
u	8

Recommended configuration parameters: (for reference only)

Push-pull Class AB1, triode self-biasing:

Ua.g2(b)	400	485 V
Ua.g2 (0)	349	422 V
Ia+g2 (0)	2x76	2x94 mA
Ia+g2 (max sig)	2x80	2x101 mA
RL (a-a)	4	4 kohm
-Ug1 (approx)	40	50 V
Pout	17	31 w
Dtot	1.5	1.5 %
Pa.g2(0)	2x26.5	2x40 w
Pa.g2 (max sig)	2x19	2x27 w
Rk	2x525	2x525 ohm

U(g1-g1. pk)	78	114 V
Zout	2	1.9 kohm

Push-pull Class AB1, tetrode self-biasing:

Ua(b)	560	V
Ua(0)	521	V
Ug2	300	V
Ia(0)	2x64	mA
Ia (max sig)	2x73	mA
Ig2(0)	2x1.7	mA
Ig2 (max sig)	2x9	mA
RL (a-a)	9	kohm
Rk	2x460	ohm
-Ug1(approx)	30	V
Pout	50	w
Dtot	3	%
Pa(0)	2x33	w
Pa(max sig)	2x28	w
Pg2(0)	2x0.5	w
Pg2 (max sig)	2x0.7	w
U(g1-g1. pk)	60	V

Ultralinear Class AB1 fixed biasing: (40% tapping points)

Ua.g2(b)	560	460 V
Ua.g2 (0)	553	453 V
Ia+g2 (0)	2x50	2x50 mA
Ia+g2 (max sig)	2x157	2x140 mA
RL (a-a)	4.5	4 kohm
-Ug1 (approx)	75	59 V
Pout	100	70 w
Dtot	2	2 %
Pa.g2(0)	2x27.5	2x22.5 w
Pa.g2 (max sig)	2x33	2x27 w
U(g1-g1. pk)	140	114 V
Zout	7	6.5 kohm

Ultralinear Class AB1 self-biasing: (40% tapping points)

Ua.g2(b)	500	375 V
Ua.g2 (0)	436	328 V
Ia+g2 (0)	2x87	2x87 mA
Ia+g2 (max sig)	2x99	2x96 mA
RL (a-a)	6	5 kohm
Rk	2x600	2x400 ohm
-Ug1 (approx)	52	35 V
Pout	50	30 w
Dtot	1.5	1 %
Pa.g2(0)	2x38	2x28.5 w
Pa.g2 (max sig)	2x17	2x16 w
U(g1-g1. pk)	104	71 V
Zout	4.8	4.5 kohm

Push-pull Class AB1 tetrode fixed-biasing:

Ua(b)	560	V
Ua(0)	552	V
Ug2	300	V
Ia(0)	2x60	mA
Ia (max sig)	2x145	mA
Ig2(0)	2x1.7	mA
Ig2 (max sig)	2x15	mA
RL (a-a)	4.5	kohm
-Ug1(approx)	34	V
Pout	100	w
Dtot	2.5	%
Pa(0)	2x33	w
Pa(max sig)	2x28	w
Pg2(0)	2x0.5	w
Pg2 (max sig)	2x4.5	w
U(g1-g1. pk)	67	V