

Shuguang Vacuum Tube 6L6GCR

Beam Tetrode: 6L6GCR (6L6G)

Compatible with: 6L6G and 5881

DESCRIPTION

Beam power tube 6L6G, 6L6GA, 6L6GB and its plate power dissipation can reach 19W. For audio frequency amplifier, it can be used as class A and AB amplifier. At the same time, these tubes also can be used rectifying circuitry. These tubes are compatible with 5881 and 6L6GC, and can be substituted with each other.



SPECIFICATION

Filament Heating

UH..... 6.3 V

IH..... 0.9 A

Maximum Ratings

	Tetrode config.	Triodes config.
Plate voltage.....	360	275V
Plate power dissipation.....	19W	19W
Second grid voltage.....	270V	-
Second grid power dissipation.....	2.5W	-
Heater voltage between cathodes....	±180	±180
For fix-biasing voltage.....	0.1MΩ	0.1MΩ
For self-biasing voltage.....	0.5MΩ	0.5MΩ

Capacitance

input capacitance..... 11.5PF

output capacitance..... 9.5PF

Muller capacitance..... 0.9PF

DC Parameters

Ua..... 250V

Ug2..... 250V

-Ug1..... 14V

Ia..... 72 mA

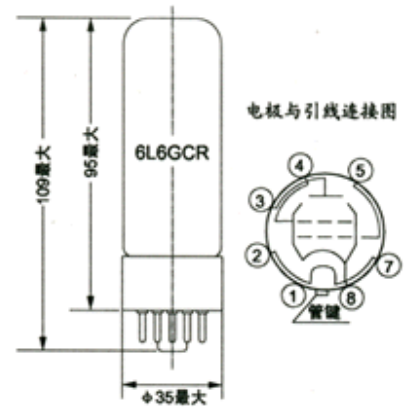
Ig2..... 6 mA

Gm..... 6 mA/v

ri..... 22.5kΩ

μg1-g2..... 6.2

Pout..... 6.5



Recommended Operating Condition(suggested value)

For single tube class A amplifier(fixed-biasing)

Ua(b).....	250 350 V
Ug2.....	250 250 V
-Ug1.....	14 18 V
Üg1(pk).....	14 18 V
Ia(0).....	72 54 mA
Ia(max.sig).....	79 66 mA
Ig2(0).....	5 2.5 mA
Ig2(max.sig).....	7.3 7 mA
ri.....	22.5 33 k Ω
Pout.....	6.5 10.8 W
Dtot.....	10 15 %

Driving class A amplifier

	Fix-biasing		Self-biasing	
Ua(b).....	250	270	270	V
Ug2.....	250	270	270	V
-Ug1.....	16	17.5	Rk=125 Ω	V
Ü(g1-g1.pk)...	32	35	28.2	V
Ia(0).....	60	67	67	mA
Ia(max.sig).....	70	77.5	72	mA
Ig2(0).....	5	5.5	5.5	mA
Ig2(max.sig).....	8	8.5	8.5	mA
ri(per tube).....	24.5	23.5	-	k Ω
Gm(per tube).....	5.5	5.7	-	mA/V
RL(a-a).....	5	5	-	k Ω
Pout.....	14.5	17.5	18.5	W
Dtot.....	2	2	2	%

For Single tube class A amplifying (self-biasing)

Ua(b).....	250 300 V
Ug2.....	250 200 V
Rk.....	170 220 ?
Üg1(pk).....	14 12.5 V
Ia(0).....	75 51 mA
Ia(max.sig).....	78 54.5 mA
Ig2(0).....	5.4 3.2 mA
Ig2(max.sig).....	7.2 4.6 mA
RL.....	2.5 4.5 k Ω
Pout.....	6.5 6.5 W
Dtot.....	10 11 %

Single tube class A amplifying triodes config.

	Fixed-biasing	Self-biasing	
Ua.g2(b).....	250	250	V
-Ug1.....	20	Rk=490 Ω	V
Üg1(pk).....	20	20	V
Ia+g2(0).....	40	40	mA
Ia+g2(max.sig)...	44	42	mA
ri.....	1.7	-	k Ω
μ.....	8	-	

Driving class AB amplifier

	Fix-biasing		Self-biasing	
Ua(b).....	360	360	360	V
Ug2.....	270	270	270	V
-Ug1.....	22.5	22.5	Rk=250 Ω	V
Ü(g1-g1.pk)...	45	45	40.6	V
Ia(0).....	88	88	88	mA

Gm.....	4.7	-	mA/V	Ia(max.sig).....	132	140	100	mA
RL.....	5	6	kΩ	Ig2(0).....	5	5	5	mA
Pout.....	1.4	1.3	W	Ig2(max.sig).....	15	11	17	mA
Dtot.....	5	6	%	RL(a-a).....	6.6	3.8	9	kΩ
				Pout.....	26.5	18	24.5	W
				Dtot.....	2	2	4	%

Driving class AB amplifier

	Fix-biasing	Self-biasing	
Ua(b).....	360	360	V
Ug2.....	225	270	V
-Ug1.....	18	22.5	V
Ū(g1-g1.pk)...	52	72	V
Ia(0).....	78	88	mA
Ia(max.sig).....	142	205	mA
Ig2(0).....	3.5	5	mA
Ig2(max.sig).....	11	16	mA
RL(a-a).....	6	3.8	kΩ
Pout.....	31	47	W
Dtot.....	2	2	%

