Shuguang Vacuum Tube 300B Series

Triode: 300B-98 (300B)

DESCRIPTION

300B-98 is compatible with **300B**

Vacuum tube 300B-98 is new and improved version of 300B. Direct heating cathode, medium power consumption triode is used for class A amplification. It is dedicated to be used in audio frequency range which requires the output power 100W.

300B-C long-life design, use pure graphite anode and its plate power dissipation can reach up to 60W. If the design parameters are adjusted properly, single tube can used as class A amplification, and can delivery the output power higher than 20W.

FEATURES

- Gold-plated grid and tube socket pins

SPECIFICATION

Filament Heating

Uf(DC)……5V
If(DC) …… 1.2A

Maximum Ratings

Plate voltage……480V
Plate dissipation power……40W
Cathode current
Self-biasing voltage……100mA
Fixed-biasing voltage……70mA

Capacitances

Input capacitance……9pF
Output capacitance……4.3pF
Muller capacitance……15pF

DC Parameters

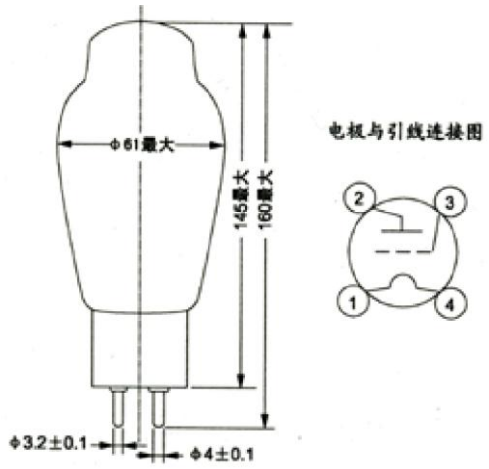
Ua…… ……300V
-Ug…… 60V
Ia……60mA
Gm……5.5mA/V
Ri……700 Ω
u……3.85

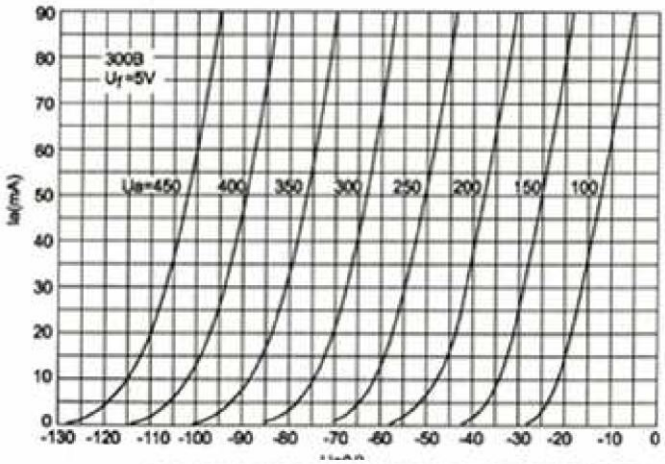
Pout……6.6W

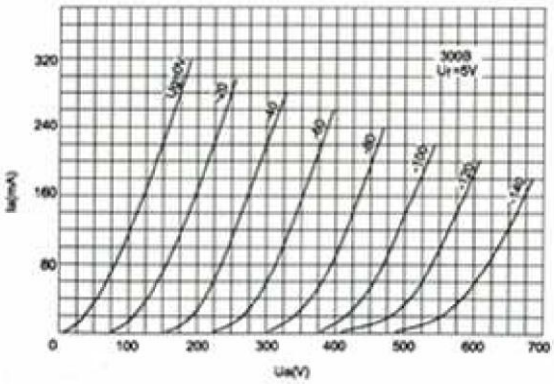
Recommended Operating Conditions

For Audio frequency amplifier
Class A amplifier:

Ua	Ug	Ia	RL	Pout	2nd
V	V	mA	ohm	W	db
200	42	30	2000	3	20
200	39	40	2500	2.6	26
250	55	30	2000	4.9	18
250	52	40	3000	4.0	26
250	50	50	2500	4.4	26
250	48	60	2000	4.7	30
250	48	60	2700	5.0	26
250	45	80	1500	5.0	26
300	65	40	2500	6.7	20
300	63	50	2000	7.2	21
300	63	50	3000	6.1	26
300	61	60	2400	6.6	26
300	58	80	1700	7.5	26
350	76	50	3600	7.8	26







350 74 60 2000 10.2 21
350 74 60 3000 8.3 26
350 74 60 4000 7.0 30
350 71 80 2200 9.6 26
400 91 40 5000 8.4 26
400 89 50 1000 11.5 21
400 89 50 4000 9.4 25
400 87 60 3500 10.5 26
400 84 80 2500 12.5 25
450 104 40 6000 9.5 26
450 102 50 5000 10.7 27
450 100 60 4000 12.5 26
450 100 60 5500 10.1 30
450 97 80 2000 17.8 21
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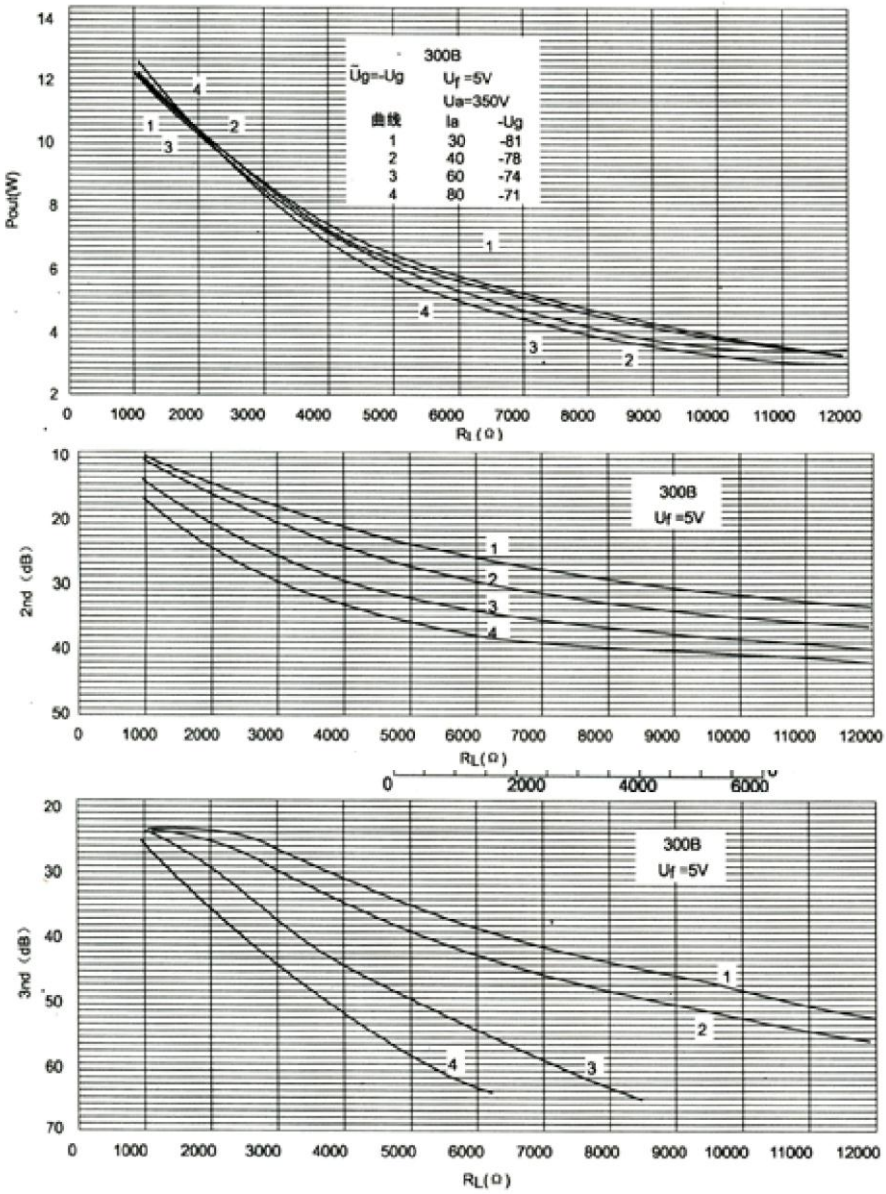
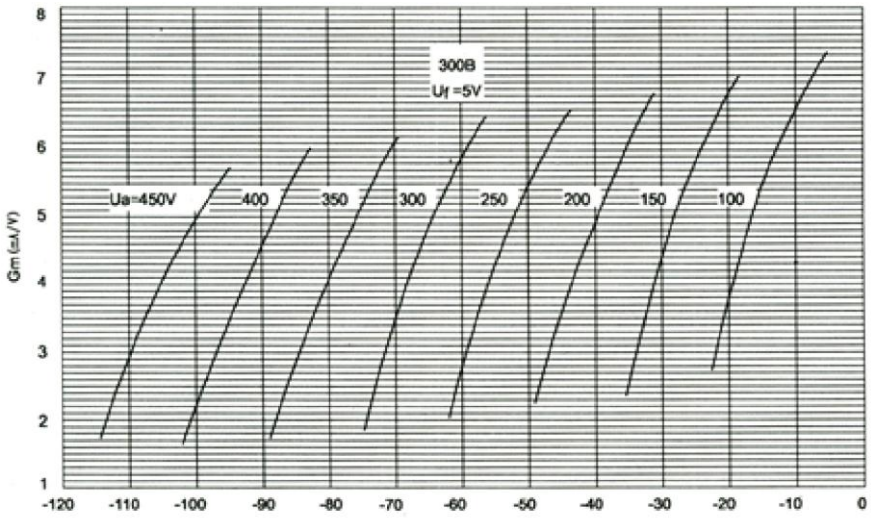
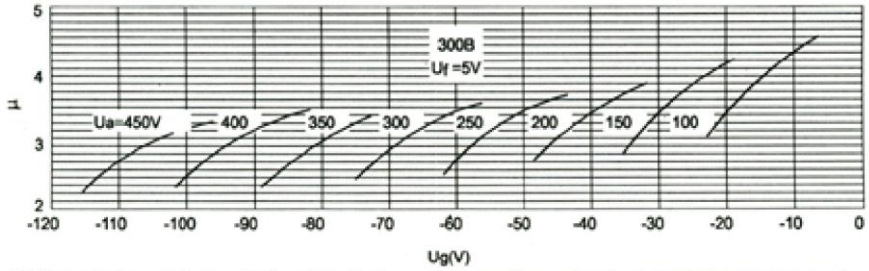
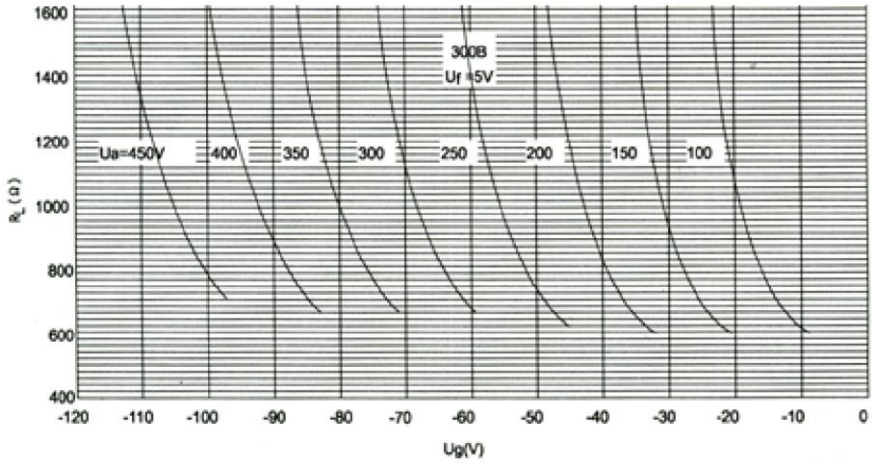
450 97 80 4500 11.5 31




300B
Uf =5V
Ua=450V
400
350
300
250
200
150
100
Gm (mA/V)
8
7
6
5
4
3
2
1
-120
-110
-100
-90
-80
-70
-60
-50
-40
-30
-20
-10
0


300B
Uf =5V
Ua=450V
400
350
300
250
200
150
100
μ
5
4
3
2
-120
-110
-100
-90
-80
-70
-60
-50
-40
-30
-20
-10
0
Ug(V)


300B
Uf =5V
Ua=450V
400
350
300
250
200
150
100
1600
1400
1200
1000
800
600
400
-120
-110
-100
-90
-80
-70
-60
-50
-40
-30
-20
-10
0
Ug(V)

Shuguang Vacuum Tube 300B Series

Triode: 300BS-B (300B)

DESCRIPTION

300BS-B is compatible with 300B, direct heating cathode and medium power consumption. Two triodes can be used in the class A amplification. It is adapted to be used in audio frequency range which requires high output power of 100W. 300B-C long-life design, use pure graphite anode and plate power dissipation can reach up to 60W. If the design parameters are adjusted properly, single tube can use as class A amplifier, and can delivery output power higher than 20W.

FEATURES

- Gold-plated socket pins
- White ceramic tube socket
- Carbonized nickel plate reduces reflection of electrons, reserving the original audio signal
- Filament hooking by using single slice of spring reduces the parasitic capacitances

Specification

Filament voltage
Uf(DC)……5V
If(DC) …… 1.2A

Maximum ratings
Plate voltage……480V
Plate dissipation power……40W
Cathode current
For self-biasing voltage……100 mA
For fixed-biasing voltage……70 mA

Capacitances
Input capacitance……9PF
Output capacitance……4.3PF
Muller capacitance……15PF

DC parameters
Ua……300V -

Ug…… 60 V

Ia……60mA

Gm……5.5mA/V

Ri……0.7 Kohm u

……3.85

Pout……6.6W