Premium and Hand-Selected Dual Triode

12AX7

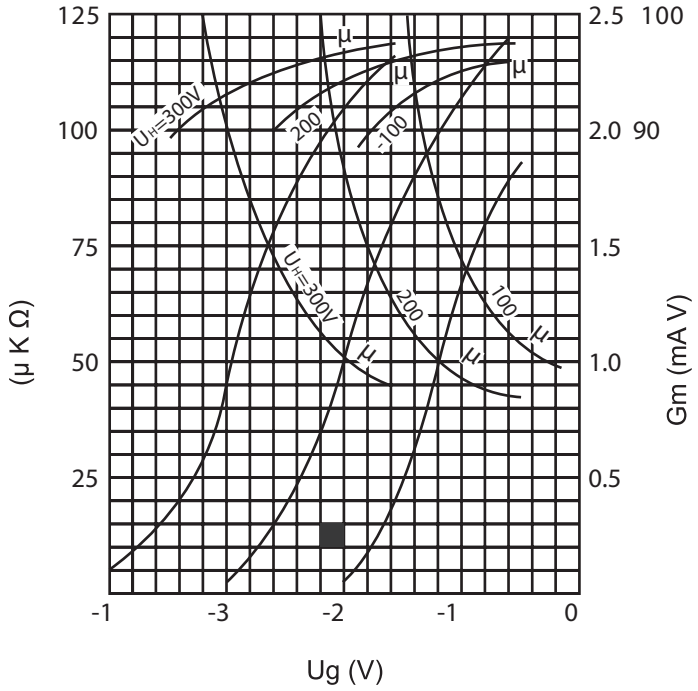
1. Overview

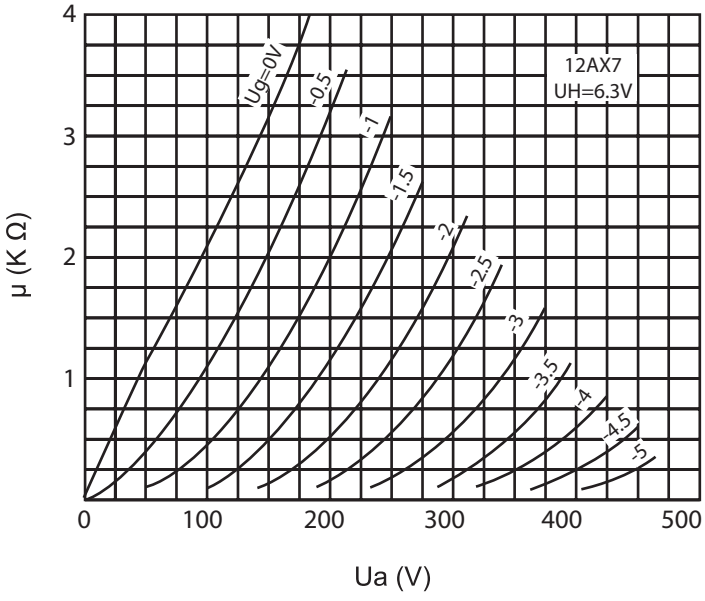
The classic 12AX7 is clearly the most famous preamp valve found in basically all vintage and current amps. The Bugera 12AX7 is a premium grade version to substitute standard 12AX7s in any amp and position. It provides maximum level of gain and overall tonal quality with superior reliability and consistency plus features an extremely open and expressive tonal spectrum, with a balanced and smooth frequency response.

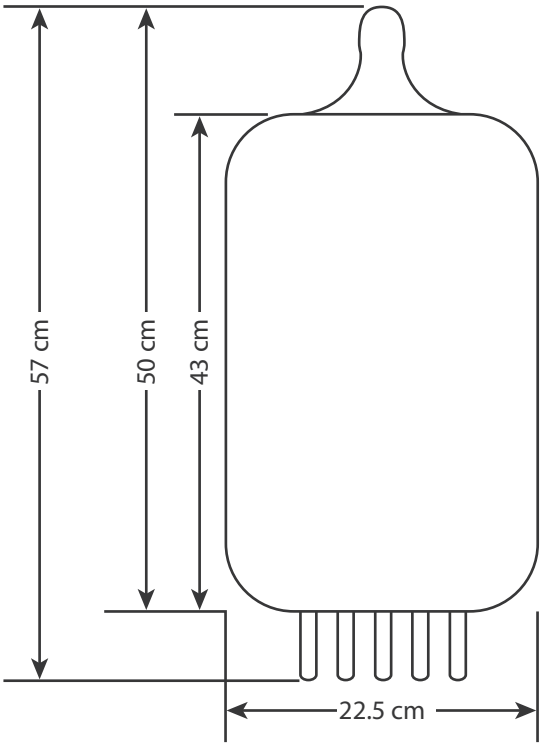
Bugera – The Soul of Valves Tested, Selected and Matched – Our Premium Quality Assurance Our state-of-the-art process starts by testing only the finest valves available from all over the world. We test and stress each valve under the toughest "real-world" conditions and measure them by applying the tightest and most demanding specifications. This highly labor-intensive process cannot be substituted by machines and selecting/matching valves is an art which we mastered over many years. Bugera valves are one of the finest and most musical valves you can find – that's what Bugera stands for. Install Bugera valves, fire up your amp and hear the real Soul of Valves.

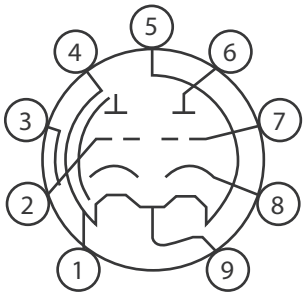
2. Specifications

Heater Voltage			
U_H	6.3 (paralleling) 12.6 (serial) V		
I_H	0.30 0.15 A		
A1actinomycete magnify limit value (each side)			
Plate Voltage	330 V		
Grid Negative Voltage	-50 V		
Grid Positive Voltage	0 V		
Plate Dissipation Power	1.2 V		
Heater Voltage between Cathodes (pk)	±180 V		
Capacitance between Poles			
	No 1	**No 2**	
Input Capacitance	1.6	1.6	PF
Output Capacitance	0.46	0.34	PF
Transroute Capacitance	1.7	1.7	PF
Static State Parameter			
Ua	100 250 V		
Ug	-1 -2 V		
Ia	0.5 1.2 mA		
Gm	1.25 1.6 mA / V		
Rk	270 200 Ω		
μ	100 100		
Ri	80 62.5 kΩ		


125
100
75
50
25
2.5
2.0
1.5
1.0
0.5
100
90
(μ K Ω)
Gm (mA V)
μ
μ
μ
μ
μ
μ
UH=300V
UH=300V
200
200
100
100
-1
-3
-2
-1
0
Ug (V)


4
3
2
1
μ (K Ω)
12AX7
UH=6.3V
Ug=0V
-0.5
-1
-1.5
-2
-2.5
-3
-3.5
-4
-4.5
-5
0
100
200
300
400
500
Ua (V)





Terminal Connections
Pin 1 – Plate (Section 2)
Pin 2 – Grid (Section 2)
Pin 3 – Cathode (Section 2)
Pin 4 – Heater
Pin 5 – Heater
Pin 6 – Plate (Section 1)
Pin 7 – Grid (Section 1)
Pin 8 – Cathode (Section 1)
Pin 9 – Heater Center-Tap