Tube Amp Doctor™
SELECTED TUBES
PREMIUM QUALITY
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TAD – 12AT7/ECC81
High Performance High-Mu Twin Triode

The **TAD™ 12AT7/ECC81** is a miniature, high-mu twin triode for use in reverb drivers or phase inverter stages of guitar and bass amplifiers. The tone is defined and rich of harmonics. Wounderful rich and deep sounding reverb is achieved
Also used as input stages for audio frequency amplifiers in HiFi and Hi-End Applications.
The **TAD™ 12AT7/ECC81** low noise tube is selected for best symmetry within 5%.
Used also in the great Brocksieper EARMAX / EARMAX PRO headphone amp and other High-End Audio amplifiers.

Characteristics of a bogey tube:

Electrical		
Heater:	Series	Parallel
Voltage (AC or DC)	12.6V +/-1.0	6.3+/-0.5
Current	0.15	0.3
Heating		Indirect
Cathode-to-heater potential, max.		100 V
Direct interelectrode capacitances, max.***		
Grid to plate		1.5 pF
Grid to cathode		2.2 pF
Grid to heater		1.4 pF
Plate to cathode		0.2 pF
Mechanical		
Operating Position		Any
Base		E9-1, Small Buton 9 Pin
Dimensions:		
Height		56 mm
Seated height		49 mm
Diameter		22.5 mm
Cooling		conventional
Approximate net weight		13 g

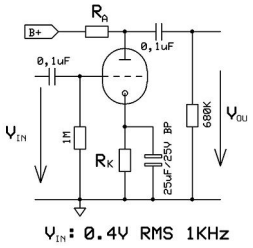
****Without external shielding, nominal values*

AF Power Amplifier	
Maximum ratings	
DC plate voltage	330 V
Positive DC Grid Voltage	0 V
Negative DC Grid Voltage	-55 V
Plate dissipation	2.5 W
Bulb temperature (surface hottest point)	190°C
Cathode Current	15 mA

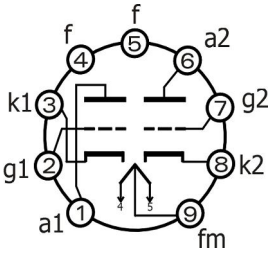
RT002, 12AT7/ECC81

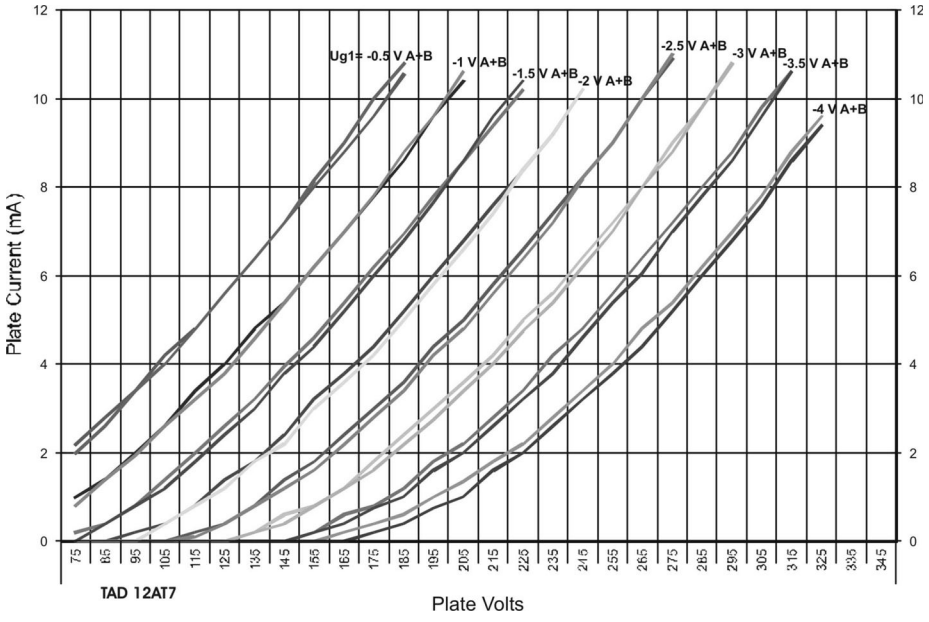
B+ / V	R_A / kΩ	R_K / kΩ	V_{Out} / V_{RMS}	V_{Out} / V_{IN}	THD / %	I_A / mA
200	47	1,20	11,8	29,5	1,9	1,5
250	47	1,20	12,1	30,3	1,5	1,9
300	47	1,20	12,3	30,8	1,3	2,4
350	47	1,20	12,4	31,0	1,1	2,8
400	47	1,20	12,6	31,5	0,9	3,2
200	100	2,20	12,8	32,0	1,9	0,9
250	100	2,20	13,0	32,5	1,6	1,1
300	100	2,20	13,1	32,8	1,3	1,3
350	100	2,20	13,2	33,0	1,1	1,6
400	100	2,20	13,3	33,3	0,9	1,8
200	220	3,90	13,0	32,5	2,1	0,5
250	220	3,90	13,2	33,0	1,6	0,6
300	220	3,90	13,4	33,5	1,4	0,7
350	220	3,90	13,5	33,8	1,1	0,8
400	220	3,90	13,6	34,0	1,0	0,9

Test arrangement:



Bottom View
Octal Base Connections





Outline View