



TAD – 6550A-STR High Performance Audio Beam Power Pentode

The TAD™ 6550A-STR is a glass envelope beam power pentode having a plate dissipation rating of 42 Watts with convection cooling. It is intended for the use in high power audio frequency amplification in either pentode, ultra-linear or triode connection and can be used in single or push-pull/parallel applications. The TAD™ 6550A-STR has an indirectly-heated oxide cathode, which may be DC operated for the absolute best hum/noise performance.

The new TAD™ 6550A-STR plate is made from a stronger and purer laminated material that improves heat transfer and has superior performance under high power conditions which are often seen with guitar amplifiers and especially in bass amps. Close manufacturing specification tolerances and improved processing provide enhanced reliability and superior sonic performance. The TAD™ 6550A-STR gives electrical and audio performance very similar to that of the legendary original GE 6550A and is hence very suited for High End applications also.

Characteristics

Electrical

Heater:	Min.	Nom.	Max.	
Voltage (AC or DC)	5.8	6.3	6.8	V
Current				ca 1.6 A
Cathode:	Oxide-coated, unipotential			
Cathode-to-heater potential, max.				+200 V
Direct interelectrode capacitances, max.***				
Grid no.1 to cathode and grid no.3, grid no.2, base sleeve and heater				<15 pF
Plate to cathode and grid no.3, grid no.2, base sleeve and heater				<10 pF
Grid no.1 to plate				<0.85 pF

Mechanical

Operating Position	Any			
Base	JEDEC #8ET, octal, 8-pin			
Dimensions:				
Height				116mm (4.567")
Seated height				103mm (4.06")
Diameter				45mm (1.77")
Cooling	Convection			
Approximate net weight				75g

***Without external shielding, nominal values

AF Power Amplifier

Maximum ratings

DC plate voltage	680 V
Grid no.2 DC (screen) voltage	440 V
Grid no.1 (control) voltage	- 300 V
DC cathode current	190 mA
Plate dissipation	42 W
Grid no.2 DC (screen) dissipation	6 W
Bulb temperature (surface hottest point)	250° C

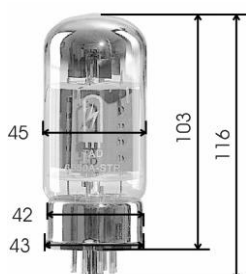
Typical Operation

AF Power Amplifier, Class A1 (single tube)

Plate Voltage	400 V
Grid 2 Screen Voltage	225 V
Grid 1 Control Voltage*	-16.5 V
Peak AF Grid 1 Control Voltage	14 V
Zero Signal Plate Current	87 mA
Maximum Signal Plate Current	105 mA
Zero Signal Grid 2 Screen Current (avg)	9 mA
Transconductance (nominal)	ca 11,000 mS
Load Resistance	3000 Ohms
Output Power at 5% distortion	10 W

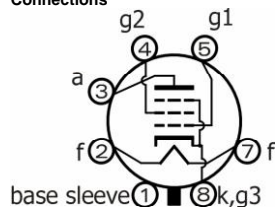
* Approximate Value (set to zero signal plate current)

Outline View:

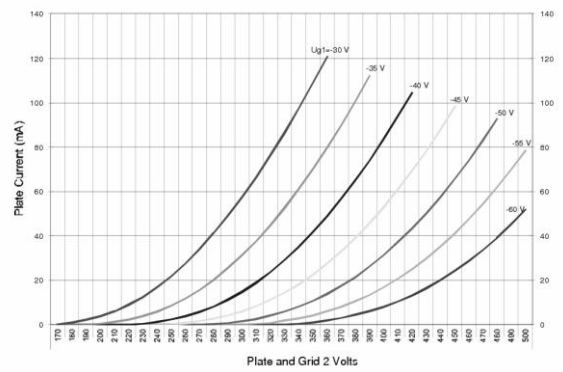


Bottom View

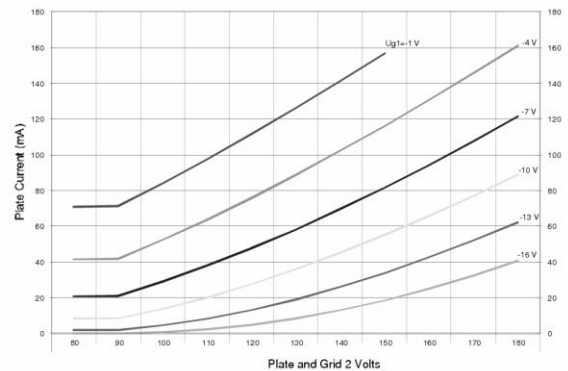
Octal Base Connections



Typical Performance 6550A-STR Curve



TAD 6550A-STR



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