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			vertical only	
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	

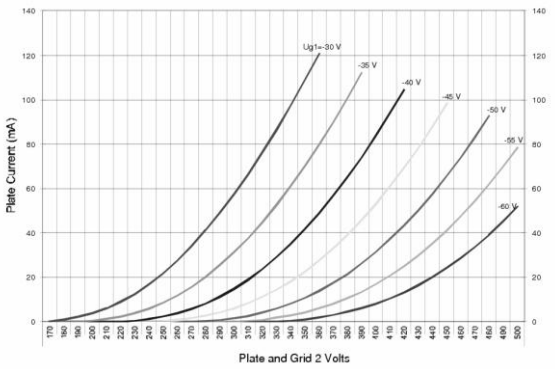
****Without external shielding, nominal values*

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)*

Typical Performance 6550A-STR Curve



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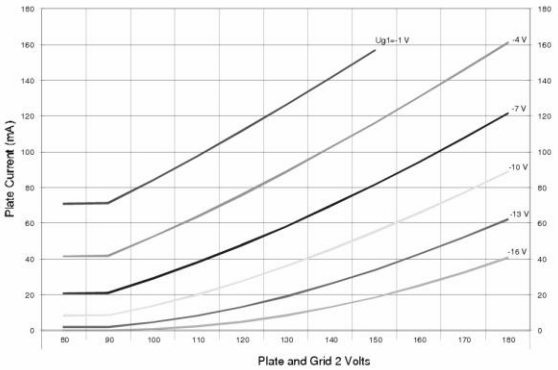

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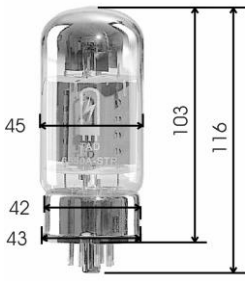
Outline View:



Bottom View
Octal Base Connections