



## TAD – 6L6WGC-STR High Performance Audio Beam Power Pentode

The TAD™ 6L6WGC-STR is a glass envelope beam power pentode having a plate dissipation rating of 30 Watts with convection cooling. It is intended for audio frequency power amplification service in either pentode, ultralinear or triode connection and single or push-pull/parallel applications. The TAD™ 6L6WGC-STR has an indirectly-heated oxide cathode, which may be DC operated for the absolute best hum/noise performance.

The TAD™ 6L6WGC-STR plate is made from a laminated material that improves heat transfer and has superior performance under overload conditions which are often seen with guitar amplifiers. Close manufacturing specification tolerances and improved processing provide enhanced reliability and superior sonic performance.

The TAD™ 6L6WGC-STR is designed to be a direct replacement for any 6L6/5881 or equivalent. The TAD™ 6L6WGC-STR gives electrical and audio performance very similar to that of the original GE 6L6GC.

### Characteristics

Electrical			
Heater:	Min.	Nom.	Max.
Voltage (AC or DC)	5.8	6.3	6.8
Current			ca. 0.9
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	<16 pF		
Plate to cathode and grid no.3, grid no.2, base sleeve and heater	<8.0 pF		
Grid no.1 to plate	<1.1 pF		
Mechanical			
Operating Position	Any		
Base	JEDEC #8ET, octal, 8-pin		
Dimensions:			
Height	95 mm (3-3/4 in.)		
Seated height	82 mm (3-1/4 in.)		
Diameter	38 mm (1-1/2 in.)		
Cooling	Convection		
Approximate net weight	50 g (1.76 oz.)		

\*\*\*Without external shielding, nominal values

### AF Power Amplifier

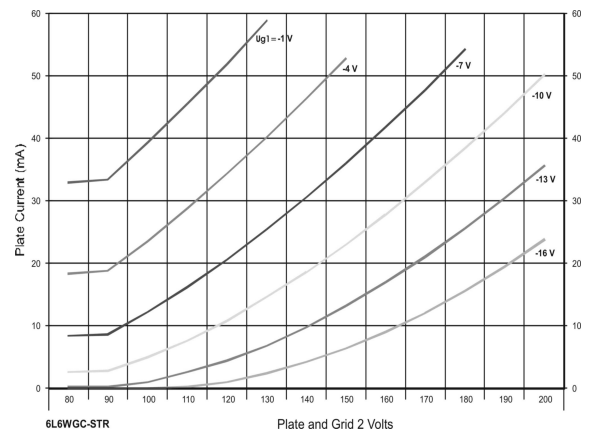
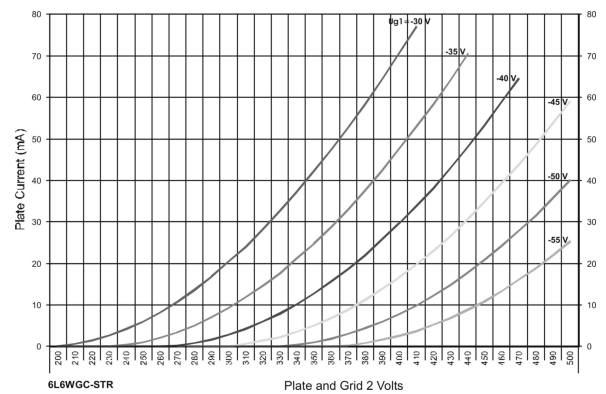
Maximum ratings	
DC plate voltage	550 V
Grid no.2 DC (screen) voltage	450 V
Grid no.1 (control) voltage	-100 V
DC cathode current	150 mA
Plate dissipation	30 W
Grid no.2 DC (screen) dissipation	5 W
Bulb temperature (surface hottest point)	250° C

### Typical Operation

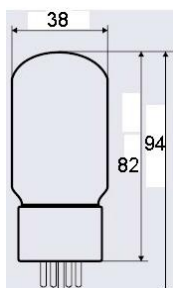
AF Power Amplifier, Class A1 (single tube)	
Plate Voltage	250 V
Grid 2 Screen Voltage	250 V
Grid 1 Control Voltage*	-14 V
Peak AF Grid 1 Control Voltage	14 V
Zero Signal Plate Current	100 mA
Maximum Signal Plate Current	105 mA
Zero Signal Grid 2 Screen Current (avg)	15 mA
Transconductance (nominal)	11,000 mS
Load Resistance	2000 Ohms
Output Power at 5% distortion	10 W

\* Approximate Value (set to zero signal plate current)

### Typical Performance 6L6WGC Curve



### Outline View



### Bottom View

