



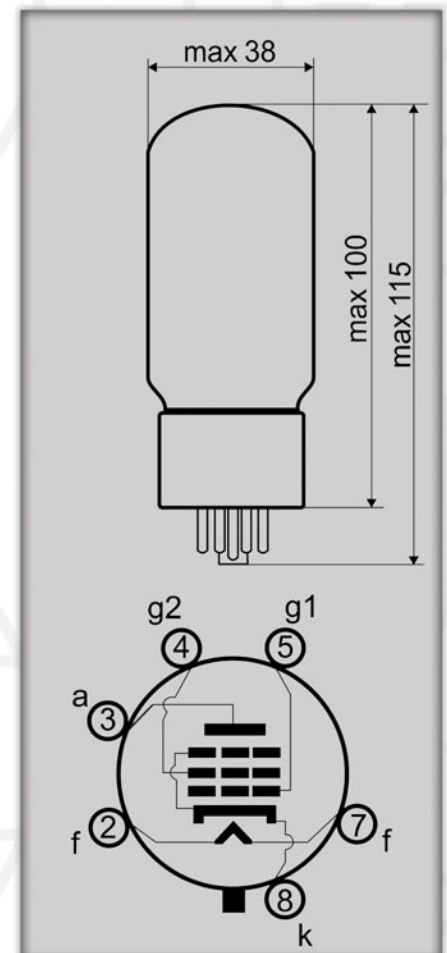
# TELEFUNKEN

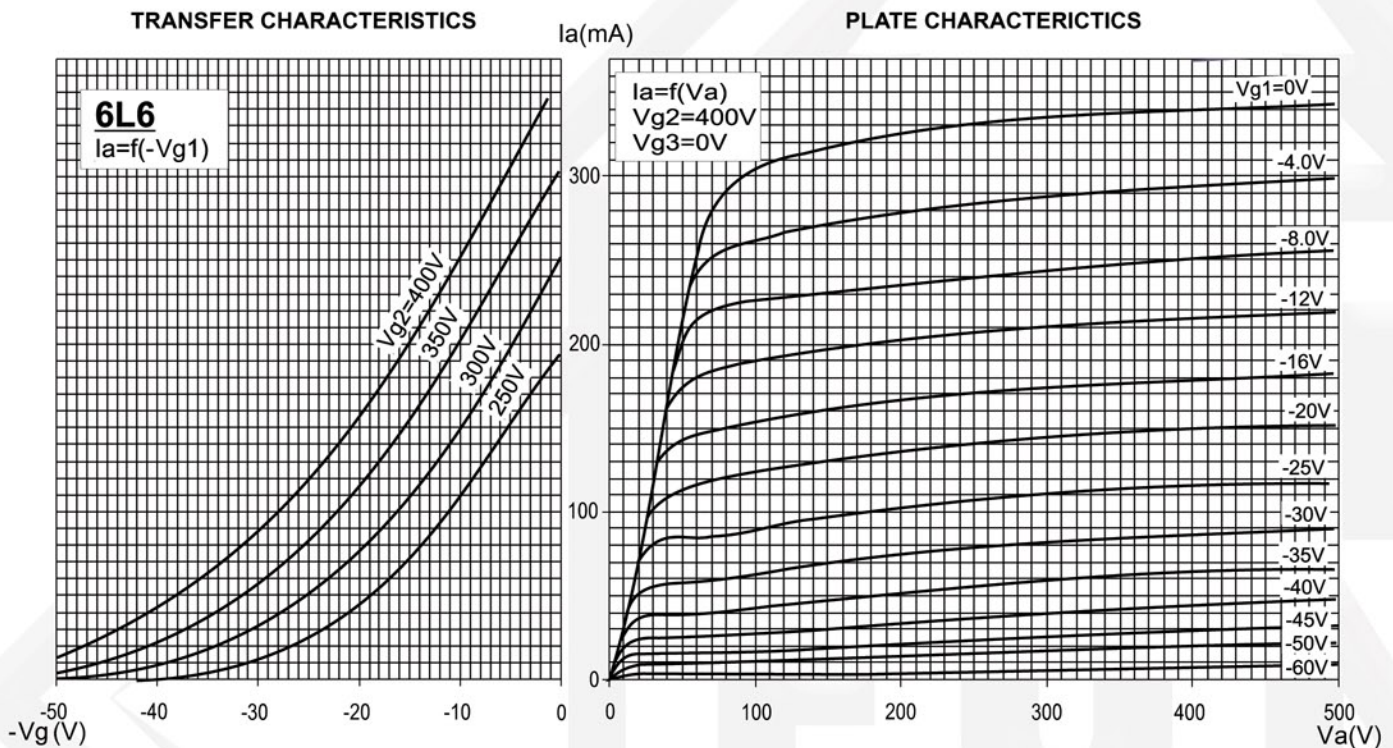
## Elektroakustik

### 6L6GC-TK TUBE DATA SHEET



Mechanical			
Type	A.F. Beam Pentode		
Base	Octal		
Number of Pins	6-Pin		
Heater Requirements - Indirect by A.C. or D.C.			
Parameter	Symbol	Value	Unit
Heater Voltage	$V_f$	6.3	V
Heater Current	$I_f$	0.9	A
Direct Interelectrode Capacitances			
Grid #1 to all except Plate	$C_{g1}$	12.5	pF
Plate to all except Grid #1	$C_a$	10	pF
Plate to Grid #1	$C_{ag1}$	1.5	pF
Maximum Ratings - Design Maximum Values			
Pentode Connection			
Plate Voltage	$V_a$	500	V
Grid #2 Voltage	$V_{g2}$	450	V
Plate Dissipation	$P_a$	30	W
Grid #1 Circuit Resistance (fixed bias)	$R_{g1}$	0.1	MΩ
Grid #1 Circuit Resistance (self bias)	$R_{g1}$	0.5	MΩ
Triode Connection - Grid #2 Connected to Plate			
Plate Voltage	$V_a$	450	V
Grid #2 Voltage	$V_{g2}$	450	V
Plate Dissipation	$P_a$	30	W
Grid #1 Circuit Resistance (fixed bias)	$R_{g1}$	0.1	MΩ
Grid #1 Circuit Resistance (self bias)	$R_{g1}$	0.5	MΩ
Typical Operation and Characteristics - Class A <sub>1</sub> Power Amplifier, Pentode Connection			
Plate Voltage	$V_a$	250	V
Grid #2 Voltage	$V_{g2}$	250	V
Grid #1 Voltage	$V_{g1}$	-14	V
Plate Current	$I_a$	72	mA
Grid #2 Current	$I_{g2}$	5	mA
Internal Plate Resistance (approx.)	$r_a$	22.5	kΩ
Max. Signal Power Output	$P_o$	6.5	W
Typical Operation and Characteristics - Class A <sub>1</sub> Push-Pull Amplifier for Two Vacuum Tubes			
Plate Voltage	$V_a$	270	V
Grid #2 Voltage	$V_{g2}$	270	V
Grid #1 Voltage	$V_{g1}$	-17.5	V
Plate Current	$I_a$	134	mA
Grid #2 Current	$I_{g2}$	11	mA
Effective Load Resistance (plate to plate)	$R_{a-a}$	5	kΩ
Max. Signal Power Output	$P_o$	17.5	W





## 6L6 HISTORY

The TELEFUNKEN 6L6GC-TK has tight and defined lows, transparent mids and a shimmering high end. When installed into your amplifier, these octal power tubes offer a focused bite with well-defined articulation.

The 6L6 was developed by RCA in 1936 as the first power tetrode, an alternative to the high output pentode designs already under patent by Philips. The modern version, the 6L6GC, dominates the guitar amplifier market no different than the earlier versions that have been found in Fender amplifiers since the 1940's.

The 6L6 is most associated with American sounding amplifiers. In comparison to the EL34 and EL84, the 6L6 tends to not break up as quickly. With it's top-end sparkle and clean headroom, there is a reason the 6L6 has had one of the longest active lifetimes of any electronic component.

## BLACK DIAMOND SERIES VACUUM TUBES

TELEFUNKEN vacuum tubes have been the benchmark of excellence in all audio applications, both production and reproduction, for many decades. Today, this rich history continues with the introduction of new production tubes from TELEFUNKEN Elektroakustik, in partnership with JJ Tubes from the Carpathian Mountains of Cadca in Slovakia.

Each tube is meticulously measured for all critical parameters of performance including transconductance, gain, noise, and microphonics. All TELEFUNKEN branded tubes are hand picked to be the best examples of Eastern European construction in the proud tradition with which the name TELEFUNKEN Elektroakustik has become synonymous.

In addition to the rigorous testing procedure, all new production TELEFUNKEN tubes are cryogenically treated to ensure durability, and subjected to an extended burn-in period to ensure superior stability. The tubes are re-measured subsequent to burn-in, and again before final packaging, in order to guarantee that only the best, lowest noise tubes are offered.