

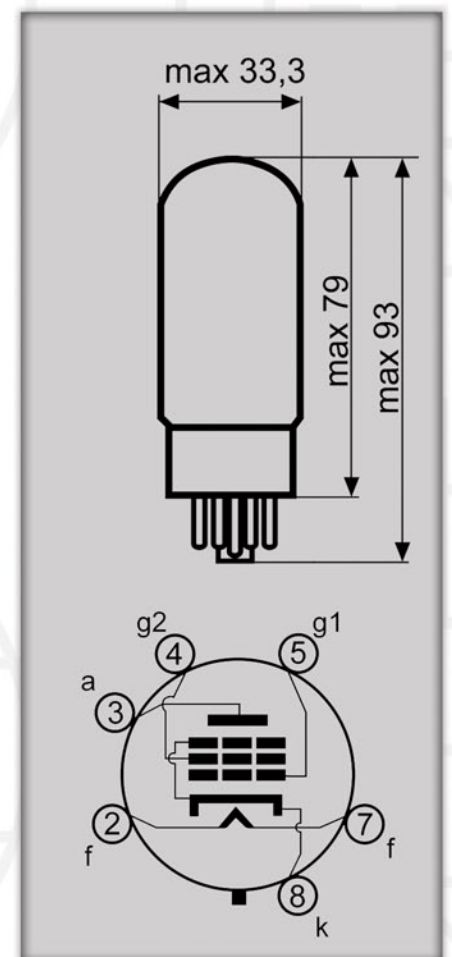


# TELEFUNKEN

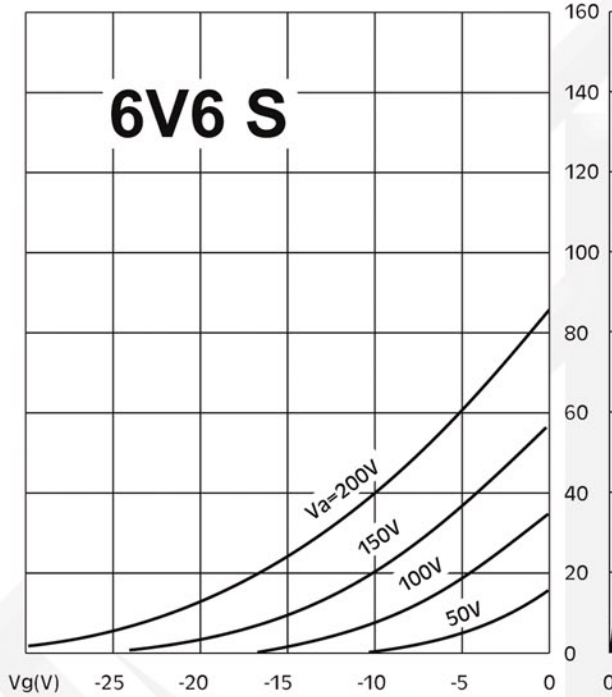
## Elektroakustik

### 6V6-TK TUBE DATA SHEET

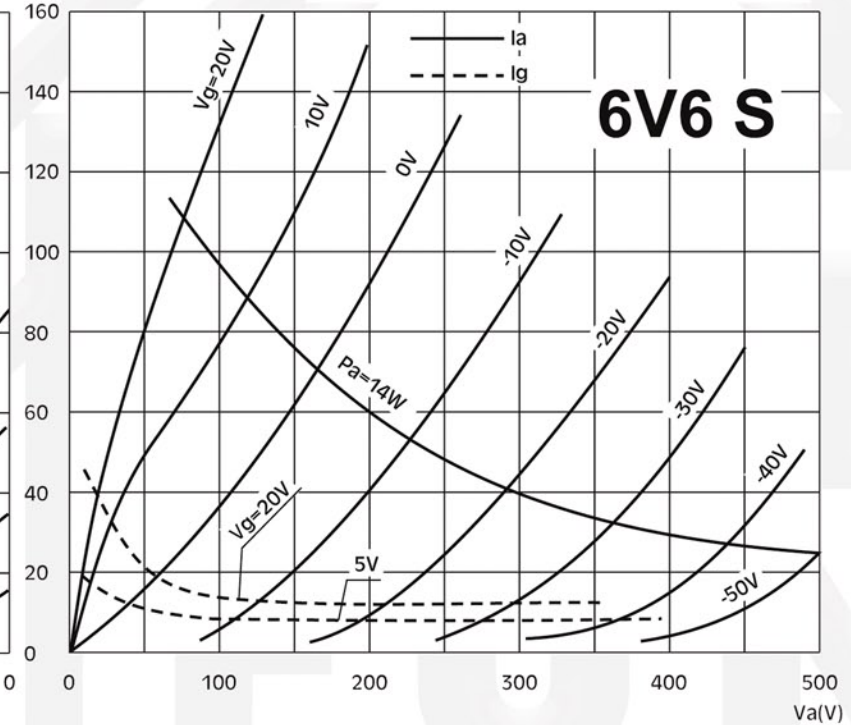
Mechanical			
Type	A.F. Beam Pentode		
Base	Octal		
Number of Pins	6-Pin		
Heater Requirements - Indirect by A.C. or D.C.			
Parameter	Symbol	Value	Unit
Heater Voltage	$V_f$	6.3	V
Heater Current	$I_f$	0.5	A
Direct Interelectrode Capacitances			
Grid #1 to all except Plate	$C_{g1}$	9	pF
Plate to all except Grid #1	$C_a$	8.5	pF
Plate to Grid #1	$C_{ag1}$	0.7	pF
Maximum Ratings - Design Maximum Values			
Pentode Connection			
Plate Voltage	$V_a$	500	V
Grid #2 Voltage	$V_{g2}$	450	V
Plate Dissipation	$P_a$	14	W
Grid #1 Circuit Resistance (fixed bias)	$R_{g1}$	0.1	M $\Omega$
Grid #1 Circuit Resistance (self bias)	$R_{g1}$	0.5	M $\Omega$
Triode Connection - Grid #2 Connected to Plate			
Plate Voltage	$V_a$	450	V
Grid #2 Voltage	$V_{g2}$	450	V
Plate Dissipation	$P_a$	10	W
Grid #1 Circuit Resistance (fixed bias)	$R_{g1}$	0.1	M $\Omega$
Grid #1 Circuit Resistance (self bias)	$R_{g1}$	0.5	M $\Omega$
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	$V_{g1}$	-12.5	V
Plate Current	$I_a$	45	mA
Grid #2 Current	$I_{g2}$	5	mA
Internal Plate Resistance (approx.)	$r_a$	50	k $\Omega$
Max. Signal Power Output	$P_o$	4.5	W
Typical Operation and Characteristics - Class A <sub>1</sub> Push-Pull Amplifier for Two Vacuum Tubes			
Plate Voltage	$V_a$	250	V
Grid #2 Voltage	$V_{g2}$	250	V
Grid #1 Voltage	$V_{g1}$	-15	V
Plate Current	$I_a$	70	mA
Grid #2 Current	$I_{g2}$	13	mA
Effective Load Resistance (plate to plate)	$R_{a-a}$	10	k $\Omega$
Max. Signal Power Output	$P_o$	10	W



## TRANSFER CHARACTERISTICS



## PLATE CHARACTERISTICS



## 6V6 HISTORY

The TELEFUNKEN Elektroakustik 6V6-TK is newly manufactured and cryogenically treated rendition of the legendary 6V6.

Originally released in 1937 by RCA, the 6V6 is a beam-power tetrode vacuum tube ideal for use in hi-fi audio equipment and music instrument amplifiers. The 6V6 has been used in popular guitar amplifiers such as the Fender Champ, Princeton Reverb, and Deluxe Reverb for decades, and the Black Diamond Series 6V6-TK is a perfect replacement for keeping the same performance and tone as the originals.

Preceded by the 6L6, the 6V6-TK is a lower-powered tube that gained much wider popularity and use. The Black Diamond Series 6V6-TK offers a robust tone and great overhead. The rigorous quality control and durable construction yields a dependable tube ready for the most demanding applications.

## 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.