



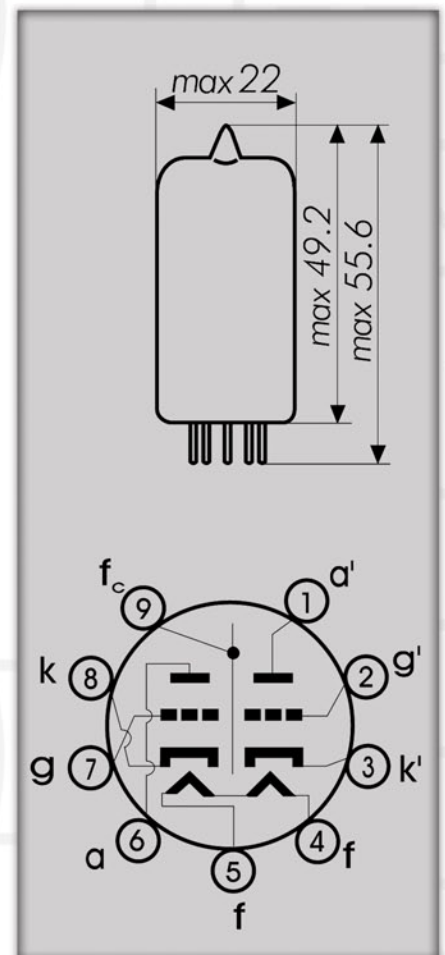
# TELEFUNKEN

## Elektroakustik

### E88CC-TK TUBE DATA SHEET



Mechanical			
Type	R.F. Dual Triode		
Base	Noval		
Number of Pins	9-Pin		
<b>Heater Requirements - Indirect by A.C. or D.C.</b>			
Heater Voltage	$V_f$	6.3	V
Heater Current	$I_f$	365	mA
<b>Direct Interelectrode Capacitances (per triode)</b>			
Grid to Cathode and Heater	$C_g$	3.1	pF
Plate to Cathode and Heater	$C_a$	0.18	pF
Grid to Plate	$C_{ga}$	1.4	pF
<b>Maximum Ratings - Design Maximum Values</b>			
Plate Voltage (in cold condition)	$V_{a0}$	550	V
Plate Voltage (when Plate Current = 0 mA)	$V_{a( a =0)}$	400	V
Plate Voltage	$V_a$	220	V
Plate Voltage (when Plate Dissipation < 0.8 W)	$V_{a(Pa < 0.8 W)}$	250	V
Plate Dissipation	$P_a$	1.5	W
Grid Dissipation	$P_g$	30	mW
Cathode Current	$I_k$	20	mA
Grid Voltage	$V_g$	-100	V
Grid Resistor (automatic bias)	$R_g$	1	MΩ
Cathode Positive to Heater Negative Voltage	$V_{+k/f-}$	120	V
Cathode Negative to Heater Positive Voltage	$V_{-k/f+}$	60	V
Cathode to Heater Resistance	$R_{kf}$	20	kΩ
<b>Typical Operation and Characteristics</b>			
Plate Voltage	$V_a$	90	V
Grid Voltage	$V_g$	-1.3	V
Plate Current	$I_a$	15	mA
Transconductance	$g_m$	12.5	mA/V
Internal Plate Resistance (approx.)	$r_a$	2.6	kΩ
Amplification Factor	$\mu$	33	



TRANSFER CHARACTERISTICS

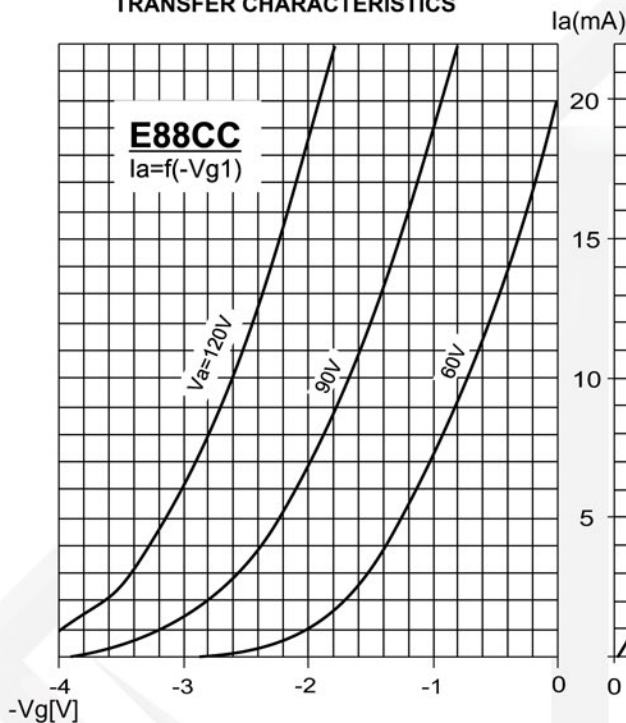
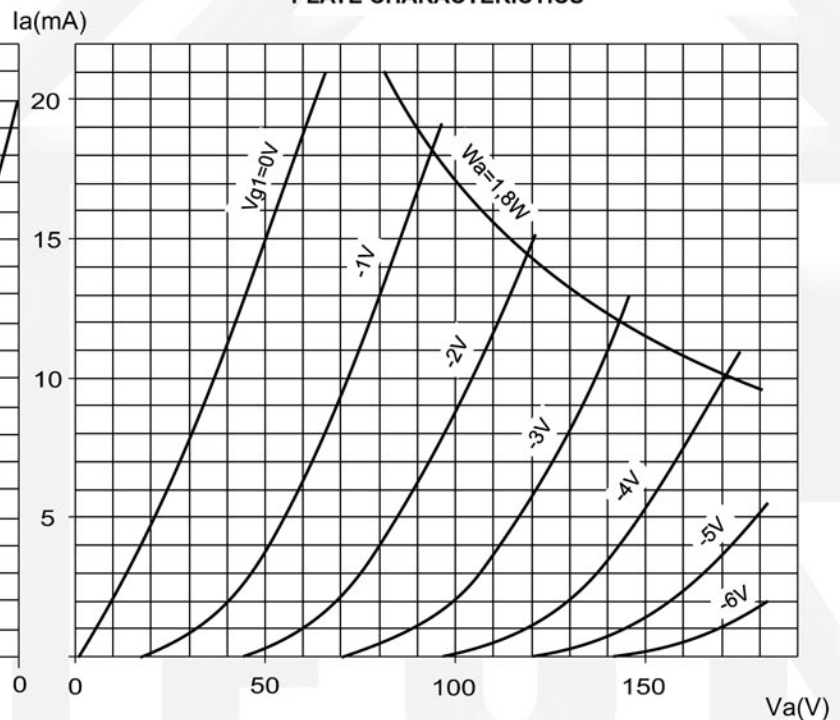


PLATE CHARACTERISTICS



## E88CC HISTORY

The newly produced TELEFUNKEN E88CC-TK gold pin tube resurrects the transparent tone and harmonic impact of historical Siemens and TELEFUNKEN tubes. Whether it is installed in a phono stage or microphone preamplifier, this E88CC-TK will breathe new life into all audio equipment offering precise imaging, unmatched dynamics and a large full-bodied soundstage.

Also known as the 6922, the E88CC was originally targeted for test equipment and radar. The E88CC has medium gain, low noise and is a favorite for tight sounding audio input stages. There are some that will argue that the E88CC is the best sounding input tube ever designed.

The E88CC is a dual triode tube like the 12AX7, but has a different pin configuration making it not a direct plug-in replacement. It is most commonly employed in amplifier designs where more clean headroom is desired. The medium gain characteristic of the tube and the low-noise design are part of why this tube sounds as good as it does in microphone preamplifier and phono preamplifier 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.