

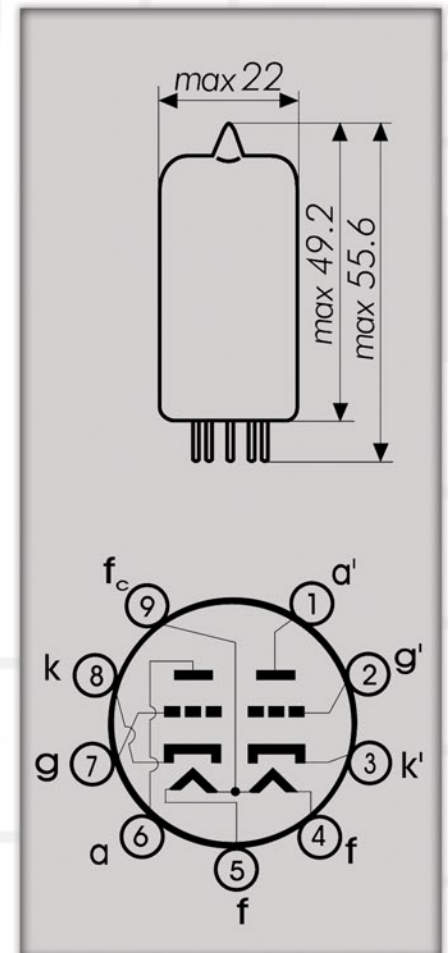


TELEFUNKEN

Elektroakustik

ECC82-TK TUBE DATA SHEET

Mechanical			
Type	R.F. Dual Triode		
Base	Noval		
Number of Pins	9-Pin		
Heater Requirements - Indirect by A.C. or D.C.			
Parallel Configuration - Pins 9-(4+5)			
Parameter	Symbol	Value	Unit
Heater Voltage	V_f	6.3	V
Heater Current	I_f	300	mA
Series Configuration - Pins 4-5			
Heater Voltage	V_f	12.6	V
Heater Current	I_f	150	mA
Direct Interelectrode Capacitances (per triode)			
Grid to Cathode and Heater	C_g	1.9	pF
Plate to Cathode and Heater	C_a	1.9	pF
Grid to Plate	C_{ga}	1.63	pF
Maximum Ratings - Design Maximum Values			
Plate Voltage	V_a	300	V
Plate Dissipation	P_a	2.75	W
Cathode Current	I_k	20	mA
Grid Voltage	V_g	-50	V
Grid Resistor (self bias)	R_g	1	MΩ
Cathode to Heater Voltage	V_{kf}	180	V
Cathode to Heater Resistance	R_{kf}	150	kΩ
Typical Operation and Characteristics - Class A ₁ Amplifier			
Plate Voltage	V_a	250	V
Grid Voltage	V_g	-8.5	V
Plate Current	I_a	10.5	mA
Transconductance	g_m	2.2	mA/V
Internal Plate Resistance (approx.)	r_a	7.7	kΩ
Amplification Factor	μ	17	



TRANSFER CHARACTERISTICS

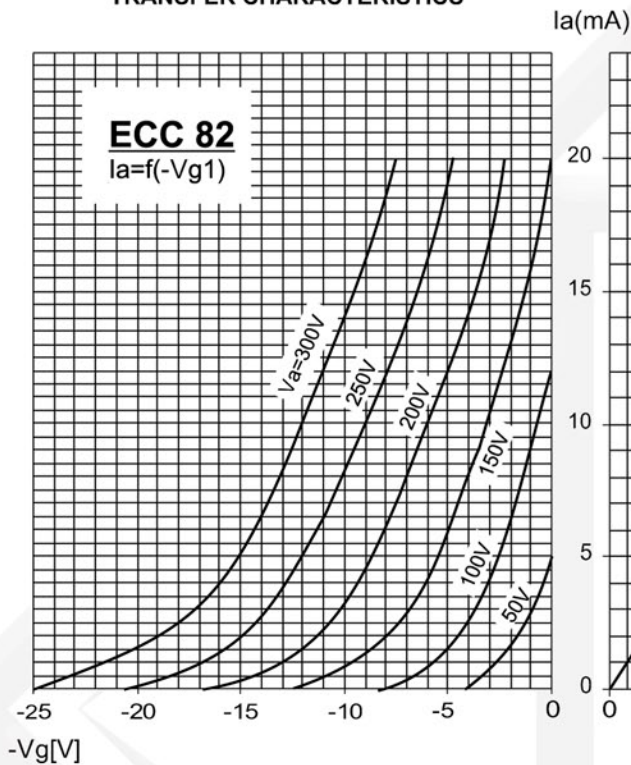
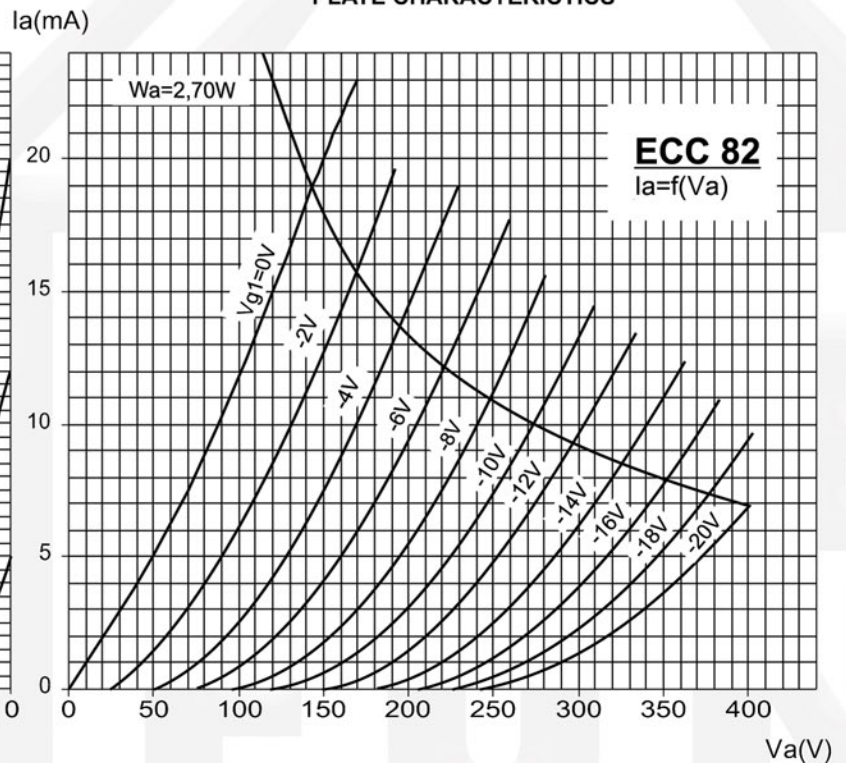


PLATE CHARACTERISTICS



ECC82 HISTORY

The TELEFUNKEN Elektroakustik ECC82-TK is a newly manufactured and cryogenically treated rendition of the classic ECC82, commonly known by the American designation 12AU7.

The ECC82 is a dual triode vacuum tube with medium gain and low noise characteristics, making it ideal for hi-fi audio equipment and instrument amplification. Commonly used as a low-noise line amplifier, driver, and phase inverter in push-pull amplifier circuits, it can replace an ECC81/12AX7 for lower gain applications.

The Black Diamond Series ECC82-TK features gold-plated pins and a gold-plated internal grid. The ECC82-TK is often considered more of a brighter tonal character rather than warm, and is characterized by its wide sense of dynamics and exceptionally quiet noise floor. It offers an accurate and focused image with a flat midrange and tight low end. The ECC82-TK is excellent in headphone amplifiers and high-end home audio and phono equipment, among many other applications. The Black Diamond Series ECC82-TK undergoes rigorous quality control and testing to deliver a dependable tube 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.