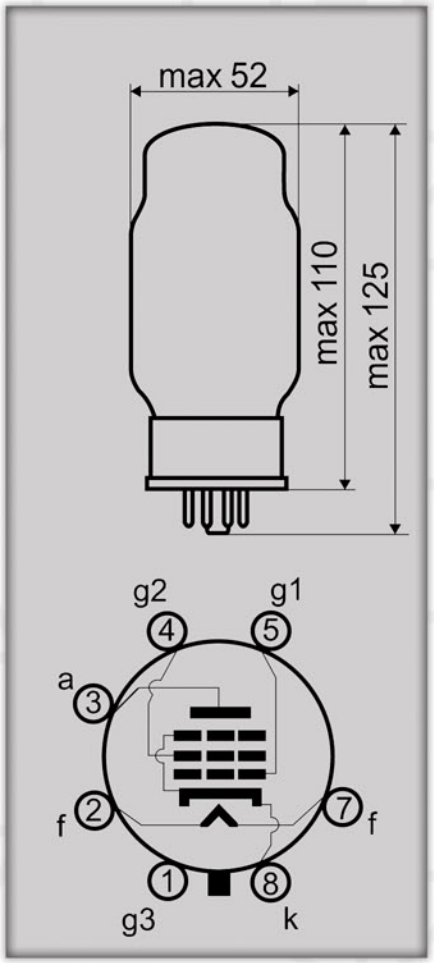
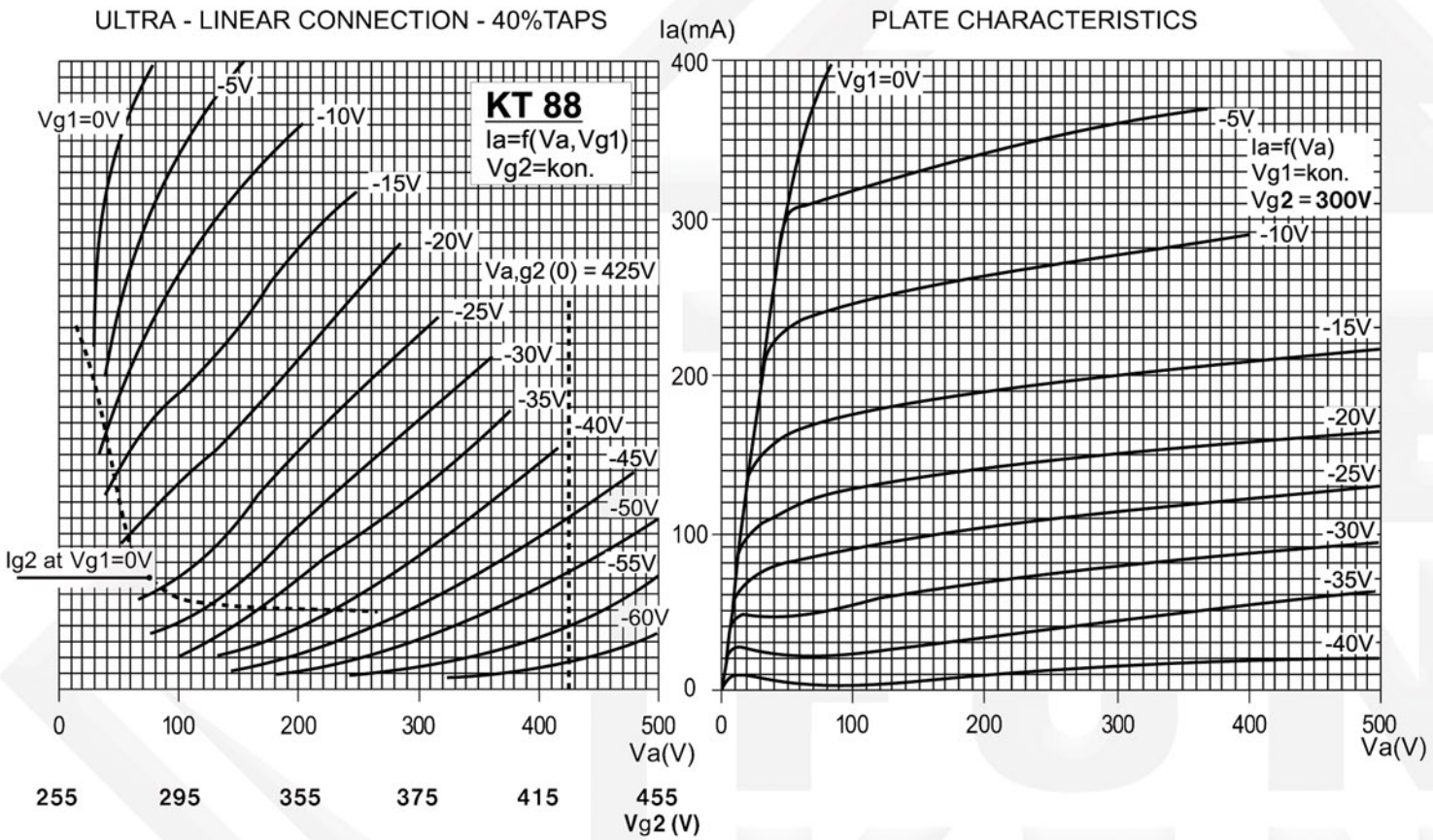
TELEFUNKEN Elektroakustik

KT88-TK Tube Data Sheet

Mechanical			
Type	A.F. Beam Pentode		
Base	Octal		
Number of Pins	7-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	1.6	A
Direct Interelectrode Capacitances			
Grid #1 to all except Plate	C_{g1}	16.5	pF
Plate to all except Grid #1	C_a	10	pF
Plate to Grid #1	C_{a-g1}	2.3	pF
Maximum Ratings - *Design Maximum Values*			
Plate Voltage	V_a	800	V
Grid #2 Voltage	V_{g2}	600	V
Plate to Grid #2 Voltage	V_{a-g2}	600	V
Grid #1 Voltage (negative bias value)	V_{g1}	-200	V
Cathode Current	I_k	230	mA
Plate Dissipation	P_a	42	W
Grid #2 Dissipation	P_{g2}	8	W
Cathode to Filament Voltage	V_{k-f}	250	V
Typical Operation and Characteristics - *Class A_1 Amplifier, Pentode Connection*			
Plate Voltage	V_a	250	V
Grid #2 Voltage	V_{g2}	250	V
Grid #1 Voltage	V_{g1}	-15	V
Plate Current	I_a	140	mA
Grid #2 Current	I_{g2}	7	mA
Transconductance	g_m	11.5	mA/V
Internal Plate Resistance (approx.)	r_a	12	kΩ
Amplification Factor	μ	8	
Typical Operation and Characteristics - *Class A_1 Amplifier, Triode Connection*			
Plate to Grid #2 Voltage	V_{a-g2}	250	V
Grid #1 Voltage	V_{g1}	-15	V
Plate to Grid #2 Current	I_{a-g2}	147	mA
Transconductance	g_m	12	mA/V
Internal Plate Resistance (approx.)	r_a	670	Ω
Amplification Factor	μ	8	





KT88 History

The TELEFUNKEN Elektroakustik KT88-TK is a newly manufactured and cryogenically treated version of the legendary KT88.

The KT88-TK is a beam-power tetrode that shares similar applications as the 6L6 and EL34, and is one of the largest tubes in its class. Originally introduced by GEC in 1956, it became competition for the American-made 6550, but with the ability to handle a much higher plate voltage of up to 800 V, the KT88 became a common choice for power amplification design.

Its characteristics of high power and low distortion make it ideal for guitar amplifier applications where the user is seeking a higher gain tone with less distortion than a 6550 will provide. Tonally, the Black Diamond Series KT88-TK has the same characteristic mid-range of the original KT88 manufactured by MOV (Marconi-Osram Valve), with an expanded low end and very high end. 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.