

SVETLANA TECHNICAL DATA

KT88

High Performance Audio Beam Power Tetrode



The Svetlana™ KT88 is a glass envelope beam power tetrode. It is intended for audio frequency power amplification service. High plate dissipation rating, close manufacturing specification tolerances and thorough processing provides improved reliability and superior sonic performance.

The Svetlana KT88 is manufactured in the Svetlana factory in St. Petersburg, Russia, and is designed to be a direct replacement for any KT88, KT90, KT99 or 6550.

The new KT88 features greatly enhanced sonic performance: Increased peak cathode emission from new cathode materials; Stable operation from extended processing and aging; Gold-plated grid; New tri-plate anode; Single-piece beam forming electrode; Precise grid/screen alignment; Improved vacuum processing; comprehensive static and audio amplifier testing before and after aging.

Characteristics

Electrical

Heater:	Min.	Nom.	Max.	
Voltage (AC or DC)	5.7	6.3	6.9	V
Current		1.6		A
Cathode:	Oxide-coated, unipotential			
Cathode-to-heater potential, max.			-250*/250**	V
Direct interelectrode capacitances***				
Grid no.1 to cathode and grid no.3, grid no.2, base sleeve and heater			16.0	pF
Plate to cathode and grid no.3, grid no.2, base sleeve and heater			12.0	pF
Grid no.1 to plate			1.2	pF

Mechanical

Operating Position	Any		
Base	Large wafer octal 8-pin with metal sleeve		
Nominal dimensions:			
Height	117 mm (4.61 in.)		
Seated height	103.5 mm (4.08 in.)		
Diameter	51 mm (2.0 in.)		
Cooling	Convection cooled		
Envelope Temperature (max)	250°C		
Approximate net weight	90 g (3.0 oz.)		

*Max with heater negative to cathode **Max with heater positive to cathode

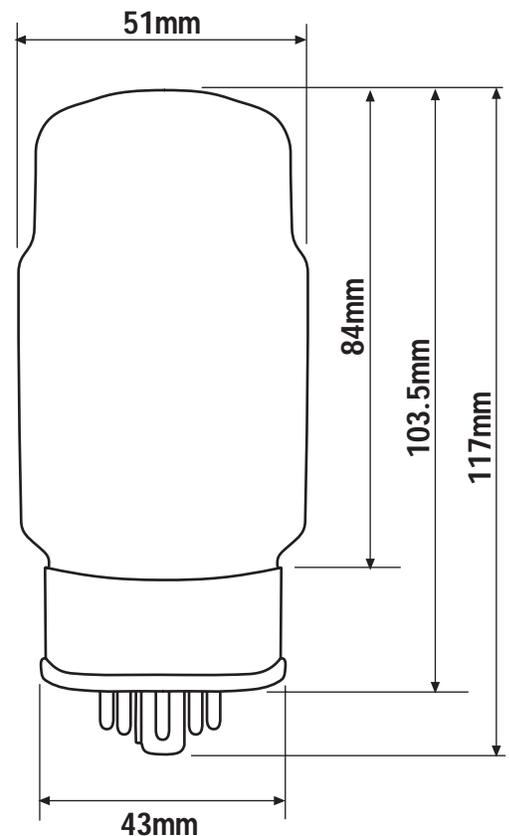
***Without external shielding

AF Power Amplifier

Maximum ratings

DC plate voltage	800	V
Grid no.2 DC (screen) voltage	600	V
Grid no.1 (control) voltage	-300	V
DC cathode current	230	mA
Plate dissipation	42	W
Grid no.2 (screen) dissipation	8	W

Svetlana Outline drawing



Svetlana KT88

High Performance Audio

Beam Power Tetrode



Typical Operation Class A₁ (single tube)

DC plate voltage	400	V
Grid no.2 DC (screen) voltage	225	V
Grid no.1 DC (control) voltage	-16.5	V
Peak AF grid no.1 (control) voltage	16.5	V
Zero-signal plate current	87	mA
Max signal plate current	105	mA
Zero signal grid no.2 (screen) current	4	mA _{dc}
Max signal grid no.2 (screen) current	18	mA
Transconductance	11.5	mA/Volt
Signal output	19	W

