



SVETLANA 3CX300A1 AUDIO POWER TRIODE

High-power triode, metal-ceramic construction, external anode with 300-watt dissipation. Designed for forced-air cooling. Extremely rugged and linear, suitable for Class A1 or AB1 service in high-end audio or music amplification.

Electrical

Voltage (AC or DC)	6.3 ± 0.3	V
Current	2.65	A
Heater-cathode voltage, max.	±100	V _{peak}
Cathode	Oxide-coated, unipotential	
Amplification factor (nominal)	9	
Transconductance (nominal)	20,000	μS
Plate resistance (nominal)	450	Ω
Interelectrode capacitances (typical), with cathode grounded :		
Input	25	pF
Output	1	pF
Feedback	10	pF

Maximum Ratings

DC plate voltage	1800	V
Maximum signal DC plate current	470	mA
Plate dissipation w/forced-air cooling	300	W
Plate dissipation w/convection cooling	30	W
Grid dissipation (maximum)	1	W
Operating temperature (metal/ceramic seals or metal core)	250°	C
Control grid maximum negative voltage	-400	V

Typical Operation, Class A, Audio Amplifier (single tube)

DC plate voltage	500	V
Grid voltage	-55	V
Peak grid drive	120	V P-P
Plate current, no signal	80	mA
Plate current, max. signal	95	mA
Effective load resistance	1600	Ω
Distortion at 1 watt into 8 ohms	0.67	%
Power output at 5% distortion	15	W

Typical Operation, Class AB1, Audio Power Amplifier, Push-Pull

DC plate voltage	500	V
Grid voltage	-45	V
Peak grid drive	100	V P-P
Plate current, no signal (both tubes)	300	mA
Load resistance, plate-to-plate	2000	Ω
Power output	40	W

Pressure drop, for plate cooling, inches of water

