



SVETLANA EL509

HIGH PERFORMANCE BEAM POWER TRODE

Large TV-type sweep tube, magnoval base with plate cap. Very rugged and conservative, suitable for retrofit or new design in RF linear amplifiers or in audio amplifiers.

Electrical

Heater	Min	Nom	Max	
Voltage (AC or DC)	5.7	6.3	6.9	V
Current		2.5		A
Transconductance (nominal)			18,000	μ S
Plate resistance (nominal)			8000	Ω
Interelectrode capacitances (typical):				
Grid to plate			2.5	pF
Grid to cathode			25	pF

Maximum Ratings

DC plate voltage	900	V
DC plate voltage, pulsed	8000	V
DC cathode current	500	mA
Grid 2 DC (screen) voltage	300	V
Screen dissipation	7	W
Plate dissipation	35	W

Typical Operation, Class A1, Audio Amplifier (single tube)

DC plate voltage	500	V
Grid 2 DC (screen) voltage	280	V
Grid 1 (control) voltage	-82	V
Peak grid 1 (control) voltage	50	V P-P
Plate current, no signal	70	mA
Plate current, max. signal	100	mA
Effective load resistance	1650	Ω
Distortion at 1 watt into 8 ohms	0.9	%
Power output at 5% distortion	14	W

