



SVETLANA 811A HIGH - MU POWER TRIODE

Power triode intended for use in class AB, class B and class C RF and Audio amplifiers. Features a low loss ceramic base and a bonded-ceramic plate cap thermal insulator; two getters operate only at high temperature. The internal structure is well supported and is aligned for horizontal or vertical mounting.

Electrical

Filament	Thoriated-tungsten	
Voltage (AC or DC)	6.3 V $\pm$ 0.3	V
Current	4	A
Amplification factor (average)	160	
Direct interelectrode capacitances, (grounded filament):		
Grid to plate	5.6	pF
Grid to filament	5.9	pF
Plate to filament	0.7	pF
Maximum frequency for full ratings	30	MHz

Linear RF Power Amplifier, Class B Grounded Grid

Maximum Ratings	CCS**	CAS***	
DC plate voltage	1250	1500	V
DC plate current	175	175	mA
Plate dissipation	45	60	W
DC Plate input	165	235	W
DC Grid current	50	50	mA

Typical Operation, frequencies to 30 MHz

DC plate voltage	1250	1500	V
DC grid voltage	0	-4.5	V
Zero-signal DC plate current *	25	16	mA
Single-tone DC plate current	130	157	mA
Average DC grid current	20	20	mA
Driving power	7	8	W
Single-tone useful output power *	120	160	W

Audio Frequency Power Amplifier or Modulator, Class B,

Grid Driven, Maximum Ratings	CCS**	ICAS***	
DC plate voltage	1250	1500	V
Maximum-signal DC plate current	175	175	mA
Plate dissipation	45	65	W
Maximum-signal plate input power	165	235	W

Typical Operation, Two Tubes

DC plate voltage	1250	1500	W
DC grid voltage	0	-4.5	V
Zero-signal DC plate current *	50	32	mA
Maximum-signal DC plate current	260	313	mA
Peak AF grid-to-grid voltage	145	170	V
Maximum-signal driving power	3.8	4.4	W
Effective load resistance (plate to plate)	12,400	12,400	Ω
Maximum-signal power output	235	340	W

* Approximate value ** Continuous commercial service

*** Intermittent commercial and amateur service

