

STC V271C/3M floating drift tube klystron



This klystron measures 108x135x47mm overall and has an 8 pin base.

Pin	Function
1	Heater
2	Cathode
3	Screen grid
4	Anode
5	Drift tube
6	Control grid
7	Resonator
8	Heater



Heater voltage	6.3V
Heater current	250mA
Max anode voltage	600V
Max resonator voltage	600V
Max drift tube voltage with respect to resonator	200V
Max screen voltage	400V
Max anode dissipation	27W
Max resonator dissipation	18W
Max drift tube dissipation	3W
Max screen dissipation	2W
Max total dissipation for all electrodes except heater	40W

Max cathode current	65mA
Max mica window seal temperature	130C
Max temperature of any other part of envelope	300C

Typical operating conditions for operation in Mode 15 (3.75 cycles) and Mode 19 (4.75 cycles). The Mode numbers are the number of quarter periods of oscillation occupied by electrons in transit through the drift space.

Mode 15 frequency modulated oscillator 6850 to 7350MHz

Anode voltage	550V
Resonator voltage	530V
Grid voltage	-50V
Drift tube voltage	395 to 505V
Screen voltage, approx., to give cathode current of 60mA and anode current of 30 to 40mA	180V
Min. power output	800mW
Electronic tuning between half power points	+/-8.5MHz
Modulation sensitivity when loaded for max power	250 to 450kHz/V

Mode 19 oscillator 6850 to 7350MHz

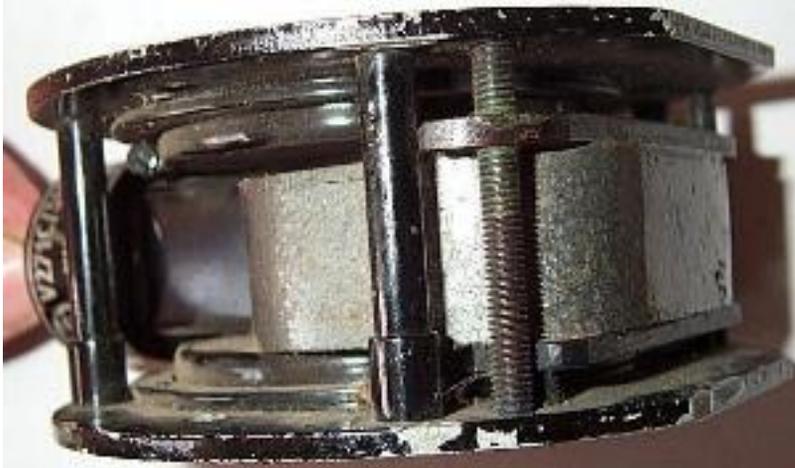
Anode voltage	370V
Resonator voltage	350V
Grid voltage	-50V
Drift tube voltage	240 to 310V
Screen voltage, approx., to give cathode current of 45mA and anode current of 22 to 30mA	120V
Min power output	200mW
Electronic tuning between half power points	+/-6MHz
Modulation sensitivity when loaded for max power	450 to 650kHz/V

The klystron has two faces, one marked OUTPUT, the other marked TUNER.



The picture above shows the inside of the 'output' side of the klystron. The one below shows that of the 'tuner' side, which is marked 18JH and 40JG.





Side view showing the magnet.



Above are pictures of each side of the device, and below is a picture of the bottom.



Data provided by Frank Philipse