

GENERAL ELECTRIC

Type VT-191 Vacuum Tube - - Instructions

The VT-191 is a filamentary air-cooled triode designed for use as an ultrahigh-frequency oscillator and power amplifier. The tube develops a typical power output of 5 watts at a frequency of 500 Mc. The frequency limit of oscillation is 750 Mc.

GENERAL

Filament Voltage	2	volts
Current	3.65	amperes
Type - Thoriated tungsten		
Average Characteristic Values Calculated at Eb = 450 volts; Ib = 67 milliamperes		
Amplification Factor	8	
Grid-plate Transconductance	2400	micromhos
Direct Interelectrode Capacitances		
Plate to Grid	1.6	μmf
Grid to Filament	1.1	μmf
Plate to Filament	0.65	μmf
Type of Cooling - Air		

PLATE MODULATED OSC & RADIO-FREQUENCY POWER AMPLIFIER - CLASS C

(Carrier conditions to which a modulation factor up to 1.0 can be applied)

Maximum D-c Plate Voltage	400	volts
Maximum D-c Plate Current	80	milliamperes
Maximum D-c Grid Current	15	milliamperes
Maximum Plate Dissipation	20	watts

OSCILLATOR & RADIO-FREQUENCY POWER AMPLIFIER - CLASS C - UNMODULATED

Maximum D-c Plate Voltage	450	volts
Maximum D-c Plate Current	90	milliamperes
Maximum D-c Plate Input	36	watts
Maximum D-c Grid Current	15	milliamperes
Maximum Plate Dissipation	30	watts

OSCILLATOR & RADIO-FREQUENCY POWER AMPLIFIER

Intermittent or keyed operation only.

Duration of operating period 0.1 second maximum.

Maximum D-c Plate Voltage	1100	volts
Maximum Peak D-c Plate Current	250	milliamperes
Maximum Average D-c Plate Current	25	milliamperes

OPERATING PRECAUTIONS

The VT-191 tube must not be subjected to appreciable mechanical shock or vibration. The thoriated tungsten filament of this tube is somewhat more fragile than the thoriated tungsten filaments of other transmitting tubes. These tubes should therefore be handled with more care to prevent filament breakage. In connecting to the terminals of the tube, care must be taken not to strain the glass. The tube may be supported from the terminals providing flexibility is maintained.

