2 volts



# Type VT-191 Vacuum Tube - - Instructions

The VT-191 is a filamentary air-cooled triode designed for use as an ultrahighfrequency 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	0	
ataSheet4U.comAmplification Factor	. 8	
Grid-plate Transconductance	2400	micromhos
Direct Interelectrode Capacitances		
Plate to Grid	1.6	μμf
Grid to Filament	1.1	μμf
Plate to Filament	0.65	μμſ
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	applie	d)
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 - UNMCDULATED

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

## OSCILLATOR & RADIO-FREQUENCY POWER AMPLIFIER Intermittent or keyed operation only.

Duration of operating period 0.1 second maximum.

Maximum D-o Plate Voltage	1100	volts
Maximum Feak D-o Flate Current	250	milliamperes
Maximum Average D-c Plate Surrent	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.

1 max diam-Seal off All leads shall be so aligned that they can be freely inserted into a gage 1/4 in thick having four holes whose diameters are 0.080 in located on true centers fixed by given dimensions. Lead ends beveled  $2\frac{27}{32}$  max  $-1\frac{11^{n}}{32}\max - 1\frac{11^{n}}{32}\max - \frac{15^{n}}{2}$ 5 max rad Glass outline at A-A  $\frac{5}{16}$  max rad Plate / terminal Grid terminal Filament terminals 3" max rad Cutline VT-191 K-8066748 2-

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GENERAL ELECTRIC COMPANY, SCHENECTADY, N. Y.