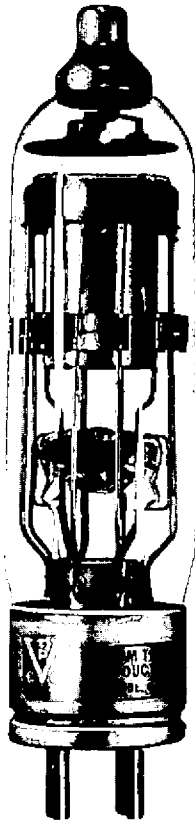


VACUUM TUBE PRODUCTS

a division of Hughes Aircraft Co.

PRODUCT DATA SHEET

VTP 7386 THYRATRON



Type VTP 7386 THYRATRON

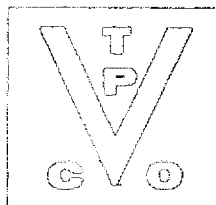
The VTP 7386 is a rugged and reliable xenon thyratron designed for grid controlled rectifier service where high efficiency is of primary concern. A typical application is for use in controlling current pulses to welding transformers for spot and seam welding machines. Another wide usage is the control of power to D.C. motors supplied from A.C. lines allowing wide ranges of motor speed control. Xenon thyratrons of this type are also used for converting A.C. power sources to adjustable current or voltage D.C. supplies, not only for general industrial uses, but also where the tubes are subjected to wide extremes of ambient temperature conditions.

The VTP 7386 has been thoroughly engineered and incorporates such features as hard glass construction, zirconium coated graphite anode, precious metal non-emitting grid construction, close and uniform grid control, low grid current, low deionization time, high frequency operation, low arc drop, high peak currents, black body heat dissipation, and automatic gettering action. It is also electrically superior to the C6JF and is interchangeable except for the base.

The VTP 7386, manufactured under tight controls at Vacuum Tube Products, is so designed as to replace any tubes designated as 5685, C6J, C6JA, or 5C21.

SPECIFICATIONS

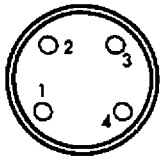
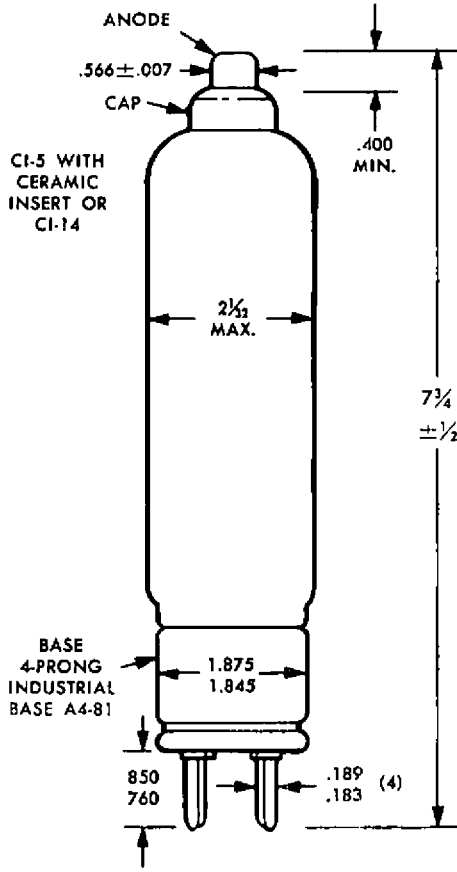
Cathode:	Directly heated filament type	Tube Voltage Drop:	With 6.4 amp. D.C. flowing through the tube, the maximum voltage drop across the tube will be 14 volts.
Heater Voltage:	2.5 volts (A.C.)	Peak Emission:	With 100 amp. D.C. flowing through the tube, the maximum voltage drop across the tube will be 45 volts.
Heater Current:	17.0 to 23.0 amperes (A.C.)	Critical Grid Voltage: *	When the anode has 1000 volts D.C. applied, the tube will start to pass current when the grid bias is made less negative and falls between -3.0 and -7.5 volts D.C.
Heating Time:	60 seconds	Critical Anode Voltage: *	When the grid has plus 3.0 volts applied, the tube will start to pass current when the anode voltage is raised and conduction will start at less than +75 volts D.C. anode voltage.
Rated Anode Current: (Continuous)	6.4 amps. (DC meter reading)	A.C. Anode Voltage for Conduction: *	With zero grid volts bias, the tube will pass current at less than 80 volts A.C. applied.
Rated Anode Current: (Average max.)	6.4 amps. (DC meter reading)		
Rated Anode Current: (15 seconds max. ON and 15 seconds min. OFF)	12.8 amps. (D.C. meter reading)		
Rated Anode Current Peak: (Continuously oscillographically recorded)	100 amps.		
Peak Forward Voltage:	1000 volts		
Peak Inverse Voltage:	1250 volts		
Operating Temperature:	-55° to +75°C		
Operating Altitude:	0 to 60,000 ft.		
Operating Frequency: (Max. recommended)	400 cycles +10%		



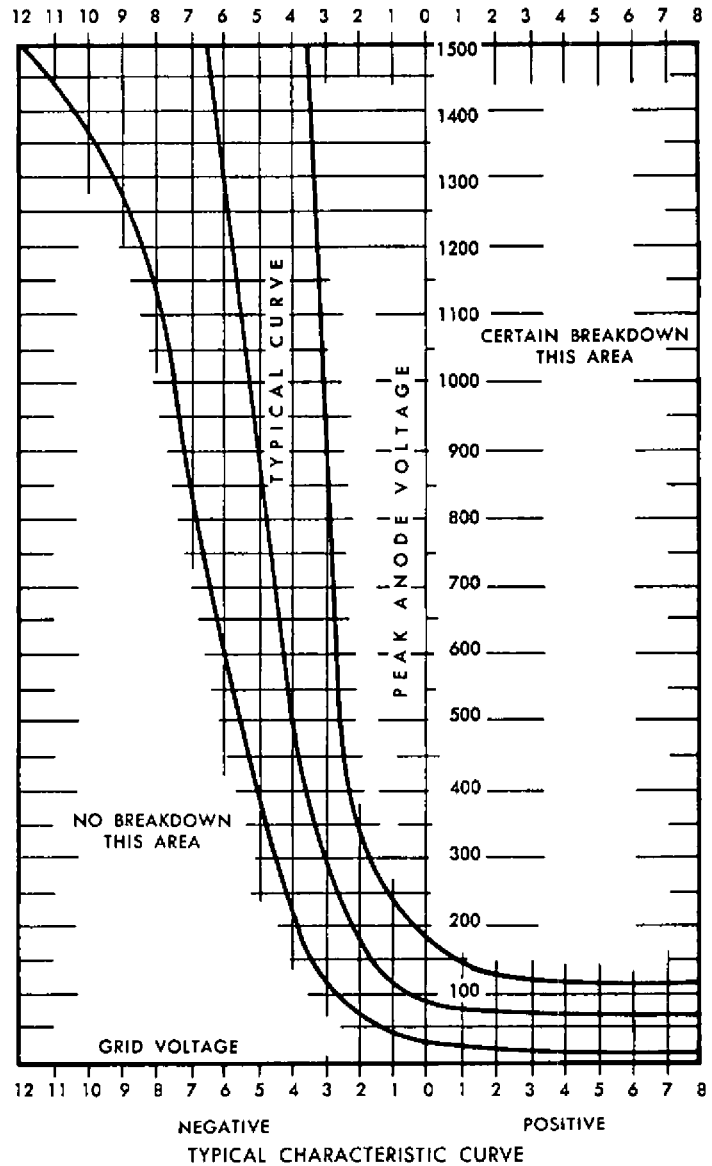
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*NOTE: The filament pin adjacent to the grid pin shall be negative with respect to the other filament pin on the half cycle that the plate is positive.

VTP 7386



BOTTOM VIEW OF BASE



- PIN #1 GRID
- PIN #2 FILAMENT
- PIN #3 FILAMENT
- PIN #4 NO CONNECTION

NOTE: FOR CIRCUIT APPLICATION MAKE CATHODE CONNECTION TO PIN #2

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