



AMPEREX ELECTRONIC CORPORATION

230 DUFFY AVENUE

HICKSVILLE, L. I.

TENTATIVE DATA

AMPEREX TYPE 6268/AX-9911

The 6268/AX-9911 is a three electrode, hydrogen filled thyatron with a self-contained and self-regulating source of hydrogen. This tube has a positive control characteristic and is designed for long-life pulse modulator applications. The life expectancy of this tube is over 1000 hours. IT IS COMPLETELY INTERCHANGEABLE IN EVERY RESPECT WITH THE STANDARD TYPE 4C35 TUBE.

GENERAL CHARACTERISTICS

ELECTRICAL

	<u>MIN.</u>	<u>B08EY</u>	<u>MAX.</u>	
Heater Voltage	5.8	6.30	6.60	volts
Heater Current (at 6.3 volts)	5.50	6.10	6.70	amps
Cathode Heating Time Required	180	—	—	sec.
Tube Drop (egk)	—	—	150	volts
Trigger Voltage (Source Unloaded)	130	—	—	volts
Trigger Rise Time	—	—	0.5	microsec.
Trigger Source Impedance	—	—	1500	ohms
Trigger Width (70.7%)	2.0	—	—	microsec.
D.C. Anode Striking Voltage at 130 volts Peak Trigger Voltage	—	—	1500	volts
Anode Delay Time (From 26% of Trigger Pulse to start of Current Pulse)	—	—	0.6	microsec.
Anode Delay Time Drift	—	—	0.15	microsec.
Time Jitter	—	—	0.02	microsec.

MECHANICAL

Dimensions	
Length	6 5/8 inches
Diameter	2 1/2 inches
Mounting Position	any
Cooling	see note 1
Clamping	see note 2
Weight (approx.)	7 ounces

Notes:

1. Cooling of the anode lead is permissible, but there shall be no air blast directly on the bulb.
2. Clamping is permissible at the base and/or the bulb in the area up to 2 1/2 inches above the top of the base only.

MAXIMUM RATINGS

ABSOLUTE VALUES

Max. Peak Anode Voltage	
Inverse	8.0 KV [*]
Forward	8.0 KV ^{**}
Max. Cathode Current	
Peak	90 amps
Average	100 ma
Max. Value of (Forward Voltage)X (Pulse Repetition Rate)X (Peak Current)	2.0 x 10 ⁹
Max. Rate of Rise of Cathode Current	1000 amps/microsec.
Max. Trigger Source Impedance	1500 ohms
Max. Trigger Rise Time (26%-70.7%)	0.5 microsec.
Max. Inverse Grid Voltage	2000 volts
Ambient Temperature Limits	-55° C to + 90° C

* For instantaneous starting applications where plate voltage is applied instantaneously, the maximum permissible forward voltage is 7000 volts and shall not be attained in less than 0.04 seconds.

** In pulsed operation, the peak inverse voltage, exclusive of spike of 0.05 microsecond maximum duration, shall not exceed 2.5 KV during the first 25 microseconds after the pulse.

