



AMPEREX ELECTRONIC CORPORATION

230 DUFFY AVENUE

HICKSVILLE, L. I.

TENTATIVE DATA

AMPEREX TYPE 6279/AX-9912

The 6279/AX-9912 is a three electrode, hydrogen filled thyratron 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 5C22 TUBE.

GENERAL CHARACTERISTICS

ELECTRICAL

	<u>MIN.</u>	<u>BOGEY</u>	<u>MAX.</u>	
Heater Voltage	5.83	6.30	6.77	volts
Heater Current (at 6.3 volts)	9.6	—	11.6	amps
Cathode Heating Time Required	300	—	—	sec.
Tube Drop (egk)	—	—	175	volts
Trigger Voltage (Source Unloaded)	200	—	—	volts
Trigger Rise Time	—	—	0.5	microsec.
Trigger Source Impedance	—	—	500	ohms
Trigger Width (70.7%)	2.0	—	—	microsec.
D.C. Anode Striking Voltage at 150 V. Peak Trigger Voltage	—	—	2500	volts
Anode Delay Time (From 26% of Trigger Pulse to start of Current Pulse)	—	—	1.0	microsec.
Anode Delay Time Drift	—	—	0.15	microsec.
Time Jitter	—	—	0.02	microsec.

MECHANICAL

Dimensions	
Length	8 1/2 inches
Diameter	2 1/2 inches
Mounting Position	any
Cooling	see note 1
Clamping	see note 2
Weight (approx.)	9 1/2 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 4 1/4 inches above the top of the base only.

MAXIMUM RATINGS

ABSOLUTE VALUES

Max. Peak Anode Voltage	
Inverse	16.0 KV*
Forward	16.0 KV**
Max. Cathode Current	
Peak	325 amps
Average	200 ma
Max. Value of (Forward Voltage)X (Pulse Repitition Rate)X (Peak Current)	3.2×10^9
Max. Rate of Rise of Cathode Current	1500 amps/microsec.
Max. Trigger Source Impedance	500 ohms
Max. Trigger Rise Time	0.5 microsec.
Max. Inverse Grid Voltage	200 volts
Ambient Temperature Limits	-50° C to + 90° C

* For instantaneous starting applications where plate voltage is applied instantaneously, the maximum permissible epy is 13.5 KV and shall not be attained in less than 0.04 seconds.

** In pulsed operation, the peak inverse voltage, exclusive of a spike of 0.05 microsecond maximum duration, shall not exceed 5.0 KV during the first 25 microseconds after the pulse.

