MAZDA
24B1
TRIGATRON

24B1

GENERAL

A trigatron is a spark gap which operates as a switch for discharging the delay line in pulse series modulation. The instant of breakdown can be accurately controlled by means of a triggering voltage applied to a third electrode. This triggering voltage distorts the field between anode and cathode converting the sphere to sphere gap into a point to sphere gap. Accuracy of control is further improved by irradiating the gap with ultra violet light from a corona discharge.

TYPICAL OPERATION (for Linear Charging Conditions)

Repetition Frequency (pulses per second)	1000	1200	1500	2500
Pulse Length (micro-second)	0.2	1.0	0.5	0.25
Approximate Peak Pulse Power Output (kW)	180	150	150	150
Line and Load Impedance (ohms)	60	80	80	80
Main Gap Hold-off Voltage - Cathode to Anode (kV peak) *	-7.2	-7.2	-7.2	-7.4
Minimum Main Gap Voltage - Cathode to Anode (kV peak)	-6.6	-6.6	-6.6	-6.8
Average Trigger Voltage (kV peak) *	3.0	3.2	3.2	3.2
Approximate D.C. Supply Voltage (kV) ¶	-4.0	-4.0	-4.0	-4.1

* With recommended circuit and an open circuit trigger voltage 8.5 kV peak with a build-up time to maximum voltage of approximately 2/3 μ Sec.

¶ Based on a peak/D.C. applied voltage ratio of 1.8:1. This ratio depends on the losses in the charging choke, varying between 1.8:1 and 1.9:1.

NOTE All voltages measured with respect to anode.

MOUNTING POSITION - Unrestricted.

BASE - Special.

DIMENSIONS

Maximum Overall Length (mm)	156
Maximum Diameter (mm)	70
Approximate Nett Weight (ozs)	7
Approximate Packed Weight (ozs)	14

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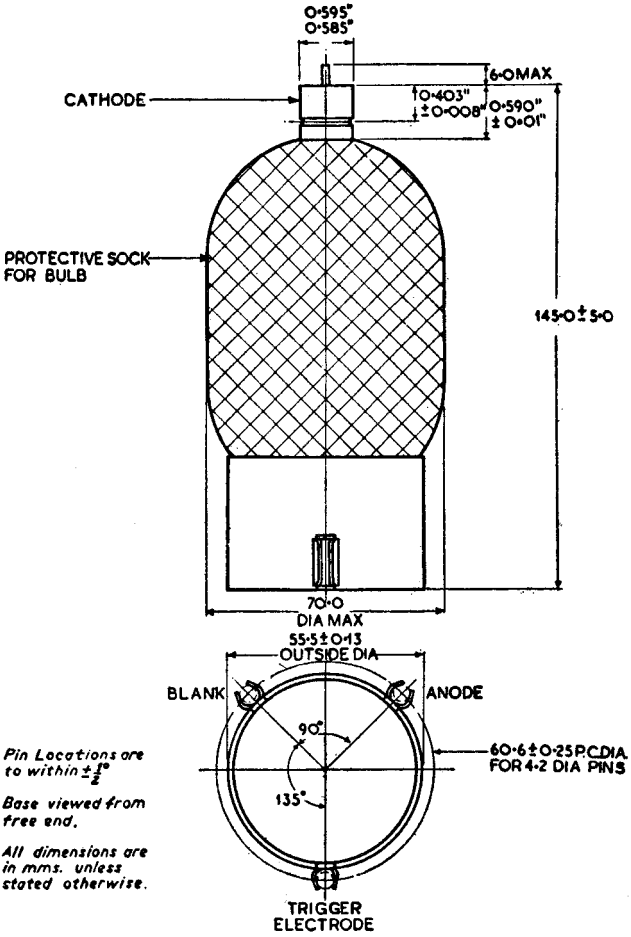
OUTLINE DRAWING



Pin Locations are to within ± 1°

Base viewed from free end.

All dimensions are in mms. unless stated otherwise.

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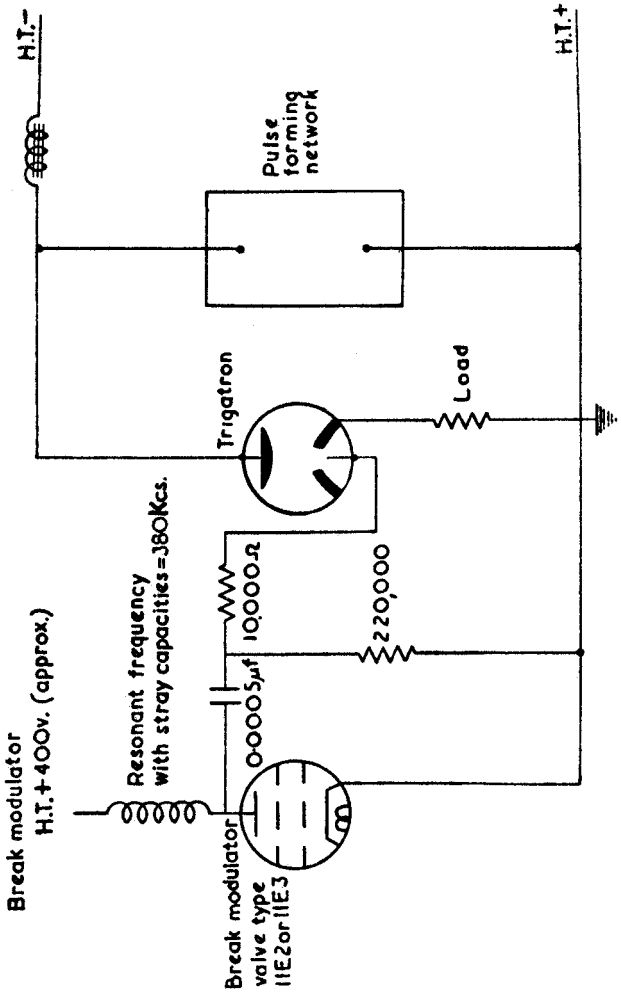

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