

MAZDA

24.C.3

COLD CATHODE TRIGATRON

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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 OPERATING

Repetition Frequency (pulses per second)	800.0
Pulse Length (μs)	1.0
Peak Pulse Power Output (kW approx.)	530.0
Line and load Impedance (ohms)	80.0
Main Gap voltage (cathode to Anode) (kV peak) †	-13.3
Average Trigger Voltage (kV peak) †	4.0
Approximate D.C. Supply Voltage (kV) ‡	7.4

† With recommended circuit and an open circuit trigger voltage 10.5 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. This ratio depends on the losses in the charging choke, varying between 1:8 and 2:0.

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

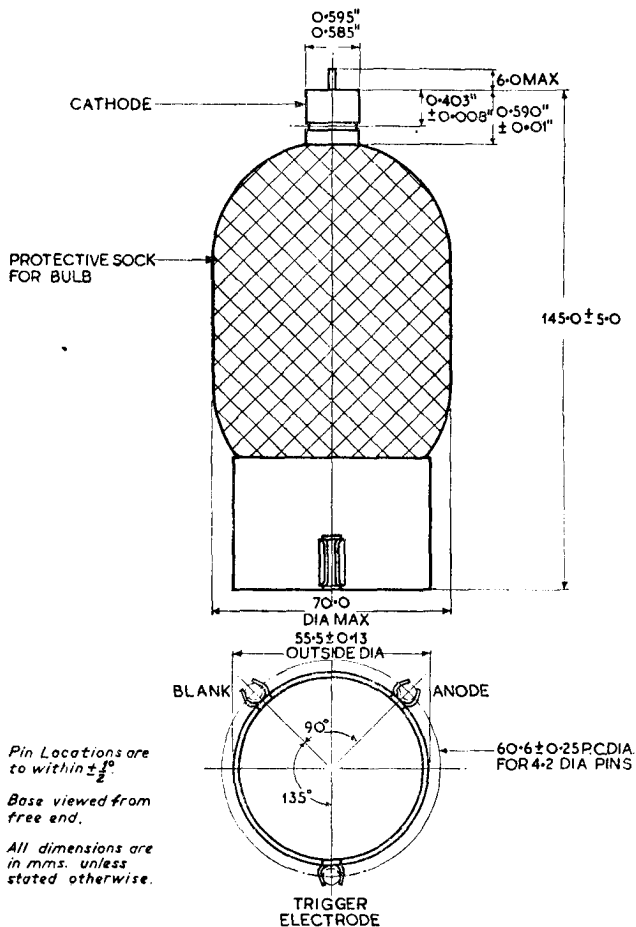
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OUTLINE DRAWING OF
MAZDA VALVE 24C3



Pin Locations are to within $\pm \frac{1}{2}^\circ$

Base viewed from free end.

All dimensions are in mms. unless stated otherwise.

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