

# MAZDA

## 24.C.3

### COLD CATHODE TRIGATRON

#### 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  |

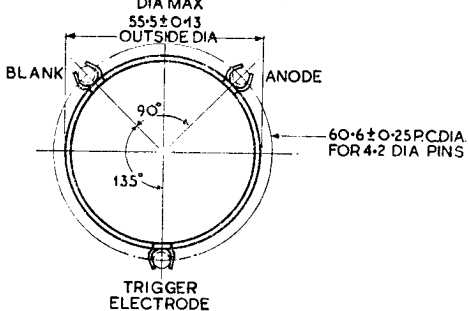
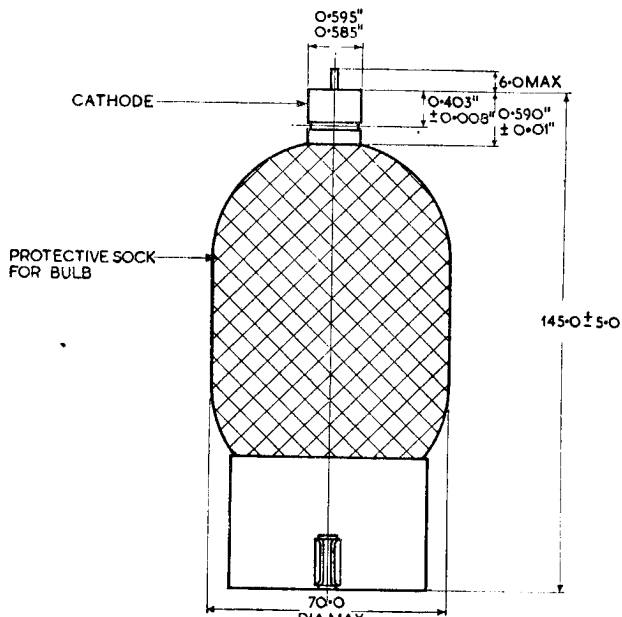
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OUTLINE DRAWING OF  
**MAZDA VALVE 24C3**



*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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