Ediswan Mazda Applications Department

Subject: Valves

Tentative

Chief Engineer's Office

Applications

Developmental Valve Type 30PL13

Dimensions:
- Overall Length Max. 78.5
- Diameter Max. 22.2
- Seated Height Max. 71.5

Rating:
- Tetrode
- Triode

Heater Current (Amps)
- Tetrode: 0.3
- Triode: Note

Heater Volts
- Tetrode: 16

Maximum Anode Dissipation (Watts)
- Tetrode: 7.0
- Triode: 1.0

Maximum Screen Dissipation (Watts)
- Tetrode: 2.4

Maximum Anode Volts
- Tetrode: 250
- Triode: A 250

Maximum Screen Volts
- Tetrode: 250

Maximum Heater to Cathode Volts (RMS)
- Tetrode: 150
- Triode: B 150

Mutual Conductance
- Tetrode: 3.4
- Triode: C

Amplification Factor
- Tetrode: 18
- Triode: C

Maximum Mean Cathode Current (mA)
- Tetrode: 75

Maximum Resistance Grid 1 to Cathode (Self Bias) (Ω)
- Tetrode: 2

Circuitry

Electrodes:
- TO
  - electrode

Capacitances PF:
- Base 9A (Noval)
  - Noval

Typical Operation:

Frame Time Base

The output stage should be designed to allow for valve spread and deterioration during life in addition to component variation. Values of total peak anode current available for a new average valve and at assumed end of life point for any valve are as follows:

- Average New Valve: 55 170 -1 175
- Assumed End of Life Condition: 50 170 -1 110

Notes:
- The V863B and 6J30L2 triode characteristics are identical.
- Maximum Peak Anode Voltage (Pulse Positive) 2.0KV.
- Maximum Peak Anode Voltage (Pulse Negative) 500V.
- Maximum pulse duration 4% of one cycle with a maximum of 800 μ secs.
- Measured with respect to the higher potential heater pin.
- V_a = 200V, I_a = 10mA.
- Maximum Tetrode Resistance Grid 1 to Cathode (Fixed Bias) 1 megohm.

Indicates a change since previous issue.

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TENTATIVE
CHARACTERISTIC CURVES OF
EDISWAN MAZDA VALVE TYPE 30 P13

ANODE CURRENT
SCREEN CURRENT
TETRODE SECTION

GRID VOLTS
PRELIMINARY
CHARACTERISTIC CURVES OF
MAZDA VALVE TYPE 30PL13.

TRIODE SECTION

HOTTER CURVE - 0.55 MILLIAMPS

ANODE CURRENT - MILLIAMPS

GRID VOLTS.

-20 -18 -16 -14 -12 -10 -8 -6 -4 -2 0