TUBE TYPE 7434

HULLARD LIMITED
Hullard House,
Torrington Place,
LONDON.W.C.1.

The 7434 is a reliable subminiature pentode for use in guided weapons.

PHYSICAL SPECIFICATIONS

Base 8 lead subminiature with flying leads (B6D/F)
Bulb Glass T-3
Maximum bulb length 1.5" (38.1mm)
Maximum bulb diameter 0.4" (10.16mm)
Minimum lead length 1.5" (38.1mm)

BASING DIAGRAM

BASING CONNECTIONS

Lead No.1 Grid No.1.
No.2 Grid No.3.
No.3 Heater
No.4 Plate
No.5 Grid No.2.
No.6 Heater
No.7 Cathode
No.8 Plate

MECHANICAL RATINGS

Maximum shock (short duration) 500 g
Maximum vibration (100hrs. max. duration) 5 g
(10mins. max. duration) 20 g
Maximum operating altitude 60,000 ft.
Maximum bulb temperature 165 °C
Ambient storage temperature range -60 to +85 °C

*This rating assumes that the vibration frequency components are varying continuously over the band 10 to 1000 c/s in a random manner.

GENERAL ELECTRICAL DATA

Heater voltage 6.3 V
Heater current 200 mA

ELECTRODE CAPACITANCES (measured with external shield)

Input 3.8 pF
Output 4.4 pF
Plate to Grid No.1 <0.3 pF

MAXIMUM RATINGS (absolute values)

Plate supply voltage 350 V
Plate voltage 190 V
Plate dissipation 1.0 W
Grid No.2 supply voltage 350 V
Grid No.2 voltage 150 V
Grid No.2 dissipation 400 mW
Cathode current 12 mA
Heater - cathode voltage 100 V
Grid No.1 circuit resistance (fixed bias) 250 kΩ
(self bias) 1.0 MΩ
### CHARACTERISTICS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Plate voltage</td>
<td>100 V</td>
</tr>
<tr>
<td>Grid No.3 voltage</td>
<td>0 V</td>
</tr>
<tr>
<td>Grid No.2 voltage</td>
<td>100 V</td>
</tr>
<tr>
<td>Grid No.1 voltage</td>
<td>-1.4 V</td>
</tr>
<tr>
<td>Plate current</td>
<td>7.0 mA</td>
</tr>
<tr>
<td>Grid No.2 current</td>
<td>2.4 mA</td>
</tr>
<tr>
<td>Mutual conductance</td>
<td>3100 micromhos</td>
</tr>
<tr>
<td>Amplification factor (μg1-g2)</td>
<td>28</td>
</tr>
<tr>
<td>*Maximum noise output voltage</td>
<td>200 mV (r.m.s.)</td>
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*Measured across a plate resistor of 22kΩ with applied minimum vibrational acceleration of 20g in the frequency range of 60 to 1000 c/s.*