DIODE PENTODE
MINIATURE TYPE

COATED UNIPOTENTIAL CATHODE
HEATER
4.7 VOLTS 0.6 AMP.
AC OR DC
ANY MOUNTING POSITION

THE 5AM8 IS A DIODE PENTODE ESPECIALLY DESIGNED FOR USE AS A VIDEO DETECTOR AND IF AMPLIFIER IN 600 MA. SERIES HEATER OPERATED TELEVISION RECEIVERS. THERMAL CHARACTERISTICS OF THE HEATER ARE CONTROLLED SUCH THAT HEATER VOLTAGE SURGES DURING THE WARM-UP CYCLE ARE MINIMIZED PROVIDED IT IS USED WITH OTHER TYPES WHICH ARE SIMILARLY CONTROLLED.

DIRECT INTERELECTRODE CAPACITANCES

<table>
<thead>
<tr>
<th></th>
<th>WITH SHIELD</th>
<th>WITHOUT SHIELD</th>
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</thead>
<tbody>
<tr>
<td>PENTODE</td>
<td></td>
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</tr>
<tr>
<td>GRID #1 TO PLATE (MAX.)</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>INPUT</td>
<td>6.0</td>
<td>6.0</td>
</tr>
<tr>
<td>OUTPUT</td>
<td>3.4</td>
<td>2.6</td>
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<tr>
<td>DIODE</td>
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<td></td>
</tr>
<tr>
<td>INPUT: P TO (H+K)</td>
<td>2.3</td>
<td>1.7</td>
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<tr>
<td>CATHODE TO (H+P)</td>
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<td>3.0</td>
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<tr>
<td>COUPLING (DIODE PLATE TO PENTODE PLATE)</td>
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<tr>
<td>COUPLING (DIODE PLATE TO GRID #1)</td>
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<tr>
<td>COUPLING (DIODE CATHODE TO PENTODE PLATE)</td>
<td>0.15</td>
<td>0.15</td>
</tr>
</tbody>
</table>

A. SHIELD #315.

CONTINUED ON FOLLOWING PAGE
RATINGS
INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE 
4.7 VOLTS

MAXIMUM HEATER-CATHODE VOLTAGE:
HEATER NEGATIVE WITH RESPECT TO CATHODE
TOTAL DC AND PEAK 200 VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE
DC-
TOTAL DC AND PEAK 100 VOLTS
MAXIMUM PLATE VOLTAGE 300 VOLTS
MAXIMUM PLATE DISSIPATION 2.8 Watts
MAXIMUM GRID #2 VOLTAGE SEE RATING CHART
MAXIMUM GRID #2 SUPPLY VOLTAGE 300 VOLTS
MAXIMUM GRID #2 DISSIPATION 0.5 Watt
MAXIMUM POSITIVE GRID #1 VOLTAGE 0 VOLTS
MAXIMUM GRID #3 VOLTAGE 0 VOLTS
MAXIMUM GRID #4 CIRCUIT RESISTANCE:
CATHODE BIAS 1.0 MEGOHM
FIXED BIAS 0.25 MEGOHM
MAXIMUM DIODE CURRENT FOR CONTINUOUS OPERATION 5.0 MA.
HEATER WARM-UP TIME (APPROX.) B 11.0 SECONDS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

HEATER VOLTAGE 4.7 VOLTS
HEATER CURRENT 0.6 AMP.
PLATE VOLTAGE 200 VOLTS
GRID #2 VOLTAGE 150 VOLTS
GRID #3 VOLTAGE 0 VOLTS
CATHODE RESISTOR 120 OHMS
PLATE CURRENT 11.5 MA.
GRID #2 CURRENT 2.7 MA.
TRANS ConductANCE 7,000 ΔMhos
PLATE RESISTANCE (APPROX.) 0.6 ΔMHO
GRID #4 VOLTAGE FOR I_b = 10 ΔMAMP. -8 VOLTS
DIODE PLATE VOLTAGE FOR DIODE CURRENT = 50 MA. C 10 VOLTS

B HEATER WARM-UP TIME IS DEFINED AS THE TIME REQUIRED FOR THE VOLTAGE ACROSS THE HEATER TO REACH 80% OF ITS RATED VOLTAGE AFTER APPLYING 4 TIMES RATED HEATER VOLTAGE TO A CIRCUIT CONSISTING OF THE TUBE HEATER IN SERIES WITH A RESISTANCE OF VALUE 3 TIMES THE NOMINAL HEATER OPERATING RESISTANCE.

C TEST CONDITION ONLY. OPERATING CONDITIONS MUST NOT EXCEED THE DESIGN CENTER RATING.

SIMILAR TYPE REFERENCE: Its characteristics are identical to the 5AM8 except for heater ratings and heater warm-up time.