POWER PENTODE
MINIATURE TYPE

COATED UNIPOTENTIAL CATHODE

AUDIO OUTPUT AMPLIFIER
IN AC/DC RECEIVERS
ANY MOUNTING POSITION

THE 50FK5 IS A POWER PENTODE IN THE 7 PIN MINIATURE CONSTRUCTION. IT IS
DESIGNED FOR USE IN AC/DC RECEIVERS.

DIRECT INTERELECTRODE CAPACITANCES - APPROX.
WITHOUT EXTERNAL SHIELD

GRID #2 TO PLATE 0.66 pf
GRID #2 TO CATHODE & GRID #3, HEATER & GRID #2 17 pf
PLATE TO CATHODE & GRID #3, HEATER & GRID #2 9 pf

HEATER CHARACTERISTICS AND RATINGS
DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS
50 VOLTS 100 MA.

HEATER SUPPLY LIMITS:
CURRENT OPERATION 100±6 MA.

MAXIMUM PEAK HEATER-CATHODE VOLTAGE:
HEATER NEGATIVE WITH RESPECT TO CATHODE 200 VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE 200A

THE DC COMPONENT MUST NOT EXCEED 100 VOLTS.

MAXIMUM RATINGS
DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

CLASS A1 AMPLIFIER

PLATE VOLTAGE 150 VOLTS
GRID #2 (SCREEN-GRID) VOLTAGE: 130 VOLTS
GRID #1 (CONTROL-GRID) VOLTAGE:
POSITIVE BIAS VALUE 0 VOLTS
PLATE DISSIPATION 5 VOLTS
GRID #2 INPUT 1.75 WATTS
BULB TEMPERATURE (AT HOTTEST POINT) 225 °C

MAXIMUM CIRCUIT VALUES

GRID #1 CIRCUIT RESISTANCE:
FOR FIXED-BIAS OPERATION 0.1 MEGOHM
FOR CATHODE-BIAS OPERATION 0.5 MEGOHM

CONTINUED ON FOLLOWING PAGE
**TYPICAL OPERATING CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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<tbody>
<tr>
<td>Plate Supply Voltage</td>
<td>110</td>
</tr>
<tr>
<td>Grid #2 Supply Voltage</td>
<td>115</td>
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<tr>
<td>Cathode Resistor</td>
<td>62</td>
</tr>
<tr>
<td>Peak AF Grid #1 Voltage</td>
<td>3</td>
</tr>
<tr>
<td>Zero-Signal Plate Current</td>
<td>32</td>
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<tr>
<td>Max.-Signal Plate Current</td>
<td>32</td>
</tr>
<tr>
<td>Zero-Signal Grid #2 Current</td>
<td>8.5</td>
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<tr>
<td>Max.-Signal Grid #2 Current</td>
<td>12</td>
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<tr>
<td>Plate Resistance (Approx.)</td>
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<tr>
<td>Transconductance</td>
<td>12800</td>
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<tr>
<td>Load Resistance</td>
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<tr>
<td>Total Harmonic Distortion</td>
<td>8</td>
</tr>
<tr>
<td>Max.-Signal Power Output</td>
<td>1.2</td>
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</tbody>
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