Description and Rating

HALF-WAVE HIGH-VACUUM RECTIFIER

GENERAL DESCRIPTION

Principal Application: The 35C3 is a miniature half-wave high vacuum rectifier designed for use in a-c/d-c receivers. This tube is similar to the 35W4 but does not have a tapped heater for pilot lamp operation.

Cathode: Coated Unipotential
Heater Voltage (AC or DC): 35.0 Volts
Heater Current: 0.15 Ampere

Envelope: T-5½ Glass
Base: E7-1, Miniature Button 7 Pin
Mounting Position: Any

PHYSICAL DIMENSIONS

TERMINAL CONNECTIONS

Pin 1 - No Connection
Pin 2 - No Connection
Pin 3 - Heater
Pin 4 - Heater
Pin 5 - Plate
Pin 6 - No Connection
Pin 7 - Cathode

BASING DIAGRAM

RETMA 5-3

BOTTOM VIEW

MAXIMUM RATINGS

DESIGN CENTRE VALUES:

Peak Inverse Plate Voltage ....... 330
Steady-State Peak Plate Current.... 600
Steady-State D-C Output Current.... 100
Peak Heater-Cathode Voltage ...... 330

Volts
Milliamperes
Milliamperes
Volts

from JETEC release #1806, Dec. 17, 1956
CHARACTERISTICS AND TYPICAL OPERATION

HALF-WAVE RECTIFIER - CAPACITOR - INPUT FILTER

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heater Voltage</td>
<td>35</td>
</tr>
<tr>
<td>Heater Current</td>
<td>150</td>
</tr>
<tr>
<td>A-C Plate Supply Voltage (RMS)</td>
<td>117</td>
</tr>
<tr>
<td>Filter Input Capacitor</td>
<td>40</td>
</tr>
<tr>
<td>Minimum Total Effective Plate Supply Impedance</td>
<td>15</td>
</tr>
<tr>
<td>D-C Output Current</td>
<td>100</td>
</tr>
<tr>
<td>D-C Output Voltage at Input to Filter (Approx.)</td>
<td></td>
</tr>
<tr>
<td>At 50 Milliamperes Load Current</td>
<td>135</td>
</tr>
<tr>
<td>At 100 Milliamperes Load Current</td>
<td>120</td>
</tr>
<tr>
<td>Tube Voltage Drop:</td>
<td></td>
</tr>
<tr>
<td>Measured with Applied D-C at 200 Milliamperes</td>
<td>18</td>
</tr>
</tbody>
</table>

TYPICAL CIRCUIT

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A-C LINE

DC OUTPUT

OTHER HEATERS
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5

4

3

7

R
OPERATION CHARACTERISTICS

HALF-WAVE RECTIFIER

$E_f = 35$ VOLTS
$E_p = 117$ VOLTS RMS
TOTAL EFFECTIVE PLATE SUPPLY IMPEDANCE = 150ohms

$C = 40, 11F$
$16$
$8$

D.C. OUTPUT VOLTAGE AT INPUT TO FILTER IN Volts

D.C. LOAD CURRENT IN MILLIAMPERES