TUNG-SOL

TWIN DIODE HIGH VACUUM RECTIFIER
VOLTAGE DOUBLER

UNIPOTENTIAL CATHODES

HEATER
25 VOLTS  0.3 AMPERE
AC OR DC

6E
BOTTOM VIEW
25Z5

7Q
BOTTOM VIEW
25Z6

THE TUNG-SOL 25Z5 AND 25Z6 ARE DESIGNED PRIMARILY FOR SERVICE AS POWER RECTIFIERS IN AC-DC RECEIVERS. TWO SEPARATE RECTIFIER SECTIONS PERMIT USING THE TUBE AS A VOLTAGE DOUBLER, FULL WAVE RECTIFIER OR HALF WAVE RECTIFIER. FOR HALF WAVE OPERATION THE TWO SECTIONS MAY BE OPERATED SEPARATELY, OR IN PARALLEL TO REDUCE TUBE DROP. THEIR RATINGS AND ELECTRICAL CHARACTERISTICS ARE IDENTICAL TO THOSE OF THE 25Z6GT/G.

RATINGS

MAXIMUM AC PLATE VOLTAGE PER PLATE (RMS)  235 VOLTS
MAXIMUM DC HEATER TO CATHODE POTENTIAL  350 VOLTS
MAXIMUM PEAK INVERSE VOLTAGE  700 VOLTS
MAXIMUM STEADY-STATE PEAK PLATE CURRENT PER PLATE  450 MA.
TUBE VOLTAGE DROP AT 150 MA. PER PLATE  22 VOLTS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

VOLTAGE DOUBLER

<table>
<thead>
<tr>
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<th>HALF WAVE</th>
<th>FULL WAVE</th>
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<tbody>
<tr>
<td>AC VOLTAGE PER PLATE (RMS) MAX.</td>
<td>117 VOLTS</td>
<td>117 VOLTS</td>
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<tr>
<td>DC OUTPUT CURRENT MAX.</td>
<td>75 MA.</td>
<td>75 MA.</td>
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<tr>
<td>TOTAL EFFECTIVE PLATE SUPPLY IMPEDANCE PER PLATE MAX.</td>
<td>30 OHMS</td>
<td>15 OHMS</td>
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A WHEN FILTER CAPACITOR LARGER THAN 90 MFDS ARE USED, IT MAY BE NECESSARY TO ADD ADDITIONAL PLATE SUPPLY IMPEDANCE.

FOR INTERPRETATION OF RATINGS REFER TO FRONT OF BOOK.

CONTINUED NEXT PAGE
HALF-WAVE RECTIFIER

AC VOLTAGE PER PLATE (RMS)_{MAX.} 117 150 235_{MAX.} VOLTS

DC OUTPUT CURRENT PER PLATE_{MAX.} 75 75 75 MA.

TOTAL EFFECTIVE PLATE SUPPLY IMPEDANCE PER PLATE_{MIN.} 15 40 100 OHMS

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25Z5, 25Z6

$E_f = 25$ V.

ONE PLATE ONLY

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25Z5, 25Z6

$E_f = 25$ V.

$E_{input} = 117$ V. RMS

VOLTAGE DOUBLER

HALF-WAVE RECTIFIER

TWO PLATES IN PARALLEL

CONDENSER INPUT

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PLATE 929-3

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