Twin Diode—High-Mu Triode

7-PIN MINIATURE TYPE
With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:
Heater, for Unipotential Cathode:
Voltage (AC or DC) .................................. 18 volts
Current ............................................. 0.1 ± 6% amp
Warm-up time (Average) .......................... 20 sec
Direct Interelectrode Capacitances:

<table>
<thead>
<tr>
<th>Without External Shield</th>
<th>With External Shield</th>
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</thead>
<tbody>
<tr>
<td>Triode grid to triode plate</td>
<td>1.8 μf</td>
</tr>
<tr>
<td>Triode grid to cathode and heater</td>
<td>2.4 μf</td>
</tr>
<tr>
<td>Triode plate to cathode and heater</td>
<td>0.22 μf</td>
</tr>
<tr>
<td>Plate of diode unit No. 2 to triode grid</td>
<td>0.2 max. μf</td>
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</tbody>
</table>

Characteristics, Class A1 Amplifier (Triode Unit):
Plate Voltage .................................. 100 volts
Grid Voltage ................................... -1 volt
Amplification Factor ............................ 100
Plate Resistance (Approx.) ................. 77000 ohms
Transconductance ............................... 1300 μmhos
Plate Current .................................. 0.6 ma

Mechanical:
Operating Position ............................. Any
Maximum Overall Length ....................... 2-1/8"
Maximum Seated Length ....................... 1-7/8"
Length, Base Seat to Bulb Top (Excluding tip) | 1-1/2" ± 3/32"
Diameter ........................................ 0.650" to 0.750"
Dimensional Outline ............................ See General Section
Bulb ............................................. T5-1/2
Base ............................................. Small-Button Miniature 7-Pin (JEDEC No. E7-1)
Basing Designation for BOTTOM VIEW .......... 7BT

Pin 1—Grid of Triode Unit
Pin 2—Cathode of Triode Unit and Diode Units No. 1 and No. 2
Pin 3—Heater
Pin 4—Heater

Pin 5—Plate of Diode Unit No. 2
Pin 6—Plate of Diode Unit No. 1
Pin 7—Plate of Triode Unit
TRIODE UNIT — AMPLIFIER — Class A

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE ........................................ 150 max. volts
GRID VOLTAGE:
  Positive-bias value ............................ 0 max. volts
PLATE DISSIPATION ................................. 0.5 max. watt
PEAK HEATER-CATHODE VOLTAGE:
  Heater negative with respect to cathode........ 100 max. volts
  Heater positive with respect to cathode......... 100 max. volts

DIODE UNITS — Two

Maximum Ratings, Design-Maximum Values:
  Values are for Each Unit
PLATE CURRENT ....................................... 1 max. ma

Characteristics, Instantaneous Test Condition:
Plate Current for plate volts = 10. .... 2 ma

*a With external shield JEDEC No. 316 connected to cathode.