TWIN DIODE—HIGH-MU TRIODE
7-PIN MINIATURE TYPE

GENERAL DATA

Electrical:
Heater, for Unipotential Cathode:
Voltage (AC or DC) ...................... 18 ± 10% volts
Current ................................ 0.1 amp
Direct Interelectrode Capacitances:

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

© With external shield JEDEC No.316 connected to cathode.
# TWIN DIODE—HIGH-MU TRIODE

## 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:

- Plate Current for plate volts = 10: 2 ma