DIODE-SUPER-CONTROL
AMPLIFIER PENTODE

COATED UNIPOTENTIAL CATHODE

HEATER
6.3 Volts 0.3 Ampere
AC or DC

ANY MOUNTING POSITION

METAL SHELL

BOTTOM VIEW
SMALL WAFFER
8-PIN OCTAL

THE 6SF7 COMBINES A DIODE AND PENTODE IN A SINGLE-ENDED CONSTRUCTION. IT IS DESIGNED FOR SERVICE AS A COMBINED IF AMPLIFIER, DETECTOR AND A.V.C. RECTIFIER.

RATINGS
INTERPRETED ACCORDING TO MIL STANDARD MB-210

PENTODE UNIT

HEATER VOLTAGE (AC OR DC) 6.3 Volts
HEATER CURRENT 0.3 Ampere
MAX. PLATE VOLTAGE 300 Volts
MAX. SCREEN VOLTAGE 100 Volts
MAX. SCREEN SUPPLY VOLTAGE 300 Volts
MIN. GRID VOLTAGE 0 Volts
MAX. PLATE DISSIPATION 3.5 Watts
MAX. SCREEN DISSIPATION 0.5 Watts
HEATER-CATHODE VOLTAGE AS LOW AS POSSIBLE

DIRECT INTERELECTRODE CAPACITANCES
WITH SHELL CONNECTED TO CATHODE

PENTODE UNIT

GRID TO PLATE (MAX.) 0.004 μF
INPUT 5.5 μF
OUTPUT 6.0 μF
PENTODE PLATE TO DIODE 0.8 μF
PENTODE GRID TO DIODE (MAX.) 0.002 μF

CONTINUED ON FOLLOWING PAGE
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

PENTODE UNIT - CLASS A1 AMPLIFIER

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate Voltage</td>
<td>100</td>
<td>250</td>
<td>Volts</td>
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<tr>
<td>Screen Voltage</td>
<td>100</td>
<td>100</td>
<td>Volts</td>
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<tr>
<td>Grid Voltage</td>
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<td>-1</td>
<td>Volts</td>
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<td>Plate Current</td>
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<td>12.4</td>
<td>MA</td>
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<tr>
<td>Screen Current</td>
<td>3.4</td>
<td>3.3</td>
<td>MA</td>
</tr>
<tr>
<td>Plate Resistance (approx.)</td>
<td>0.2</td>
<td>0.7</td>
<td>Megohm</td>
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<tr>
<td>Transconductance</td>
<td>1975</td>
<td>2050</td>
<td>Mhmhos</td>
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<tr>
<td>Grid Bias (approx.) For</td>
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<tr>
<td>Transconductance of 10 Mhmhos</td>
<td>-35</td>
<td>-35</td>
<td>Volts</td>
</tr>
</tbody>
</table>

DIODE UNIT

The diode unit is placed around the cathode, the sleeve of which is common to the pentode unit.

SIMILAR TYPE REFERENCE: Except for heater ratings, same characteristics and application as type 12SF7.