TUNG-SOL

DIODE

FOR
HORIZONTAL FREQUENCY DAMPER
SERVICE IN T.V. RECEIVERS
ANY MOUNTING POSITION

_SOCKET TERMINALS, NUMBERS 3, 2, 4 & 6 SHALL NOT BE USED AS THE POINTS

GLASS BULB
SHORT INTERMEDIATE SHELL
7 PIN OCTAL 05-85
OUTLINE DRAWING
JEDEC 9-43

THE 6DQ4 IS A HEATER-CATHODE TYPE DIODE DESIGNED FOR USE IN HORIZONTAL FREQUENCY DAMPER SERVICE IN TELEVISION RECEIVERS. IN OPERATION, THE TUBE CAN WITHSTAND HIGH VOLTAGE PULSES OF HORIZONTAL LINE FREQUENCY BETWEEN CATHODE AND BOTH HEATER AND PLATE ELEMENTS, SUCH AS NORMALLY ENCOUNTERED IN "DIRECT-DRIVE" CIRCUITS.

DIRECT INTERELECTRODE CAPACITANCES
WITHOUT EXTERNAL SHIELD

HEATER TO CATHODE 4.0 pf
PLATE TO CATHODE AND HEATER 5.0 pf
CATHODE TO PLATE AND HEATER 6.5 pf

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-739

AVERAGE CHARACTERISTICS 6.3 VOLTS 1200 MA.

HEATER SUPPLY LIMITS:
VOLTAGE OPERATION 6.3±0.6 VOLTS
MAXIMUM HEATER CATHODE VOLTAGE:
HEATER NEGATIVE WITH RESPECT TO CATHODE DC COMPONENT 900 VOLTS
TOTAL DC AND PEAK 5500 VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE DC COMPONENT 100 VOLTS
TOTAL DC AND PEAK 300 VOLTS

CONTINUED ON FOLLOWING PAGE
MAXIMUM RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

FOR TV DAMPER SERVICE $A$, $B$

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Inverse Plate Voltage</td>
<td>6500</td>
</tr>
<tr>
<td>Steady State Peak Plate Current</td>
<td>1000</td>
</tr>
<tr>
<td>DC Output Current</td>
<td>175</td>
</tr>
<tr>
<td>Plate Dissipation</td>
<td>6.0</td>
</tr>
</tbody>
</table>

CHARACTERISTICS

Tube Voltage Drop
(Tube Conducting at 250 MA.)
See Chart 32 Volts

$A$ FOR OPERATION IN A 525-LINE, 30-FRAME SYSTEM AS DESCRIBED IN "STANDARDS OF GOOD ENGINEERING PRACTICE FOR TELEVISION BROADCAST STATIONS: FEDERAL COMMUNICATIONS COMMISSION". THE DUTY CYCLE OF THE VOLTAGE PULSE MUST NOT EXCEED 5% OF ONE SCANNING CYCLE AND ITS DURATION IS LIMITED TO 10 MICRO SECONDS.

$B$ OPERATION OF THIS TUBE AS A POWER RECTIFIER IS NOT RECOMMENDED.