HIGH VOLTAGE HIGH VACUUM DIODE

DESCRIPTION
The Central 7131/XD-2 is a forced-air cooled hard tube diode specifically designed for rectifier, charging and shunt diode service up to 40Kv peak inverse voltage. The tube design features a special thoriated tungsten filament capable of high peak currents and long life. The external anode allows for high anode dissipation ratings and efficient air cooling when used with the recommended Central air socket. This air socket permits maximum air flow at the anode. The 7131/XD-2 can dissipate 3Kw continuously at an air flow of 190 cfm.

SPECIFICATIONS

PHYSICAL
Overall Length ........................................... 6½ inches
Overall Diameter ......................................... 4½ inches
Weight ...................................................... 5½ pounds (approx.)
Mounting Position ........................................ Vertical
Mounting Socket ........................................... CAS-A or CAS-B Series
Type of Cooling ........................................... Forced air

Air Flow
<table>
<thead>
<tr>
<th>Velocity (cfm)</th>
<th>Anode Dissipation Rating (Kw)</th>
<th>Pressure Drop (in. of water)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>1.0Kw</td>
<td>0.20</td>
</tr>
<tr>
<td>75</td>
<td>1.8Kw</td>
<td>0.26</td>
</tr>
<tr>
<td>125</td>
<td>2.4Kw</td>
<td>0.58</td>
</tr>
<tr>
<td>190</td>
<td>3.0Kw</td>
<td>1.21</td>
</tr>
</tbody>
</table>

Max. Incoming Air Temperature .................. 45°C
Max. Glass Seal Temperature ..................... 180°C

ELECTRICAL (RECTIFIER)
Filament ............................................... Special Thoriated Tungsten
Filament Voltage ...................................... 13 Volts A.C.
Filament Current ..................................... 36 Amperes
Starting Filament Surge Current ................ 80 Amperes (max.)
Peak Inverse Voltage ................................. 40,000 Volts (max.)
Anode Current ........................................ 3 Amperes
Peak Anode Current .................................. 15 Amperes

ELECTRICAL (CLIPPER, SHUNT or CHARGING DIODE)
Filament Voltage ...................................... 14.5 Volts A.C. (clipper)
13 Volts A.C. (charging)
Filament Current ...................................... 40 Amperes (clipper)
36 Amperes (charging)
Starting Filament Surge Current ................ 80 Amperes (max.)
Peak Inverse Voltage ................................. 40,000 Volts (max.)
Anode Current (RMS) ................................. 6 Amperes
Peak Anode Current .................................. 150 Amperes (clipper)
PULSE CHARACTERISTICS

AVERAGE ANODE CHARACTERISTICS

FILAMENT CHARACTERISTICS

$E_f = 13 V$.