This data should be read in conjunction with the Installation and Operating Instructions.

ABRIDGED DATA

Fixed frequency c.w. magnetron intended primarily for use in microwave drying, food processing and dielectric heating equipment.

Frequency (-915) .......................... 915 MHz
(-896) .......................... 896 MHz

Output power (note 7) ....................... 75 Kw

Magnet ................................... Separate Electro (fig. 1)

Output .................................... Modified 30Kw waveguide transition to WR 975 waveguide. (fig. 1) (note 2)

Cooling-Anode ............................... Water. (note 3)

Dome ....................................... Forced Air.

Cathode .................................... Forced Air.

Circulator .................................. The use of a circulator is required.

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GENERAL

Electrical

Cathode.............................................Directly Heated.
Heater voltage.................................12.6 V
Heater current.................................112 A
Heater surge current.........................250 (Max) A
Cathode pre-heating time.................3 (Minimum) Min

Mechanical

Dimensions........................................See outline drawing (fig. 3)
Weight...........................................15 lbs.
Mounting position.............................Vertical with R.F. gasket (fig. 4)
Support..........................................Magnetic pole piece (fig. 5) (note 2)
Filament connectors..........................Fig. 6

MAXIMUM AND MINIMUM RATINGS (ABSOLUTE VALUES)

These ratings cannot necessarily be used simultaneously, and no individual rating should be exceeded.

<table>
<thead>
<tr>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heater current</td>
<td>110</td>
</tr>
<tr>
<td>Heater surge current</td>
<td>---</td>
</tr>
<tr>
<td>Anode voltage (note 4)</td>
<td>---</td>
</tr>
<tr>
<td>Anode current</td>
<td>2</td>
</tr>
<tr>
<td>Input power</td>
<td>---</td>
</tr>
<tr>
<td>Outlet water temperature</td>
<td>---</td>
</tr>
<tr>
<td>V.S.W.R. At output of waveguide transition (note 5)</td>
<td>---</td>
</tr>
<tr>
<td>Pressurizing of waveguide</td>
<td>14</td>
</tr>
</tbody>
</table>
TYPICAL OPERATION

Operational Conditions

Electro magnet current (note 6) ......................... 5.0 A
Heater voltage ............................................. 9.5 V
Heater current (note 1) ................................. 85 A
Anode current ............................................. 5.0 A

TYPICAL PERFORMANCE

Anode voltage .............................................. 17 KV
Output power (note 7) ..................................... 75 KW

TEST CONDITIONS AND LIMITS

The magnetron is tested to comply with the following specification.

<table>
<thead>
<tr>
<th>Test Condition</th>
<th>Anode Voltage KV</th>
<th>Anode Current A</th>
<th>VSWR</th>
</tr>
</thead>
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<tr>
<td>1</td>
<td>17</td>
<td>5.0</td>
<td>1.1:1</td>
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LIMITS

<table>
<thead>
<tr>
<th>Test</th>
<th>Po</th>
<th>Frequency-915</th>
<th>Frequency-896</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>1</td>
<td>75</td>
<td>905</td>
<td>925</td>
</tr>
</tbody>
</table>
NOTES

1. The heater current must be reduced within 5 seconds after the start of oscillation according to the schedule in fig. 2.

2. The tube can be mounted in the standard 25-30 Kw waveguide transition—electromagnet.

3. A water flow of at least 3.0 gpm must be used to cool the anode of the tube. Cooling air flow of 5 CFM for the cathode and 40 CFM for the dome must also be applied. All cooling circuits must be interlocked to shut the tube down in case of failure. Use of C.T.L. filament connectors and air duct is recommended. Operation of all cooling systems must be continued for 3 minutes after removal of H.V. and filament supplies.

4. The anode voltage ripple should be less than 0.5%. This can be accomplished with the use of a choke, or poly phase transformer.

5. The tube is burned-in with a VSWR of 3:1 varied through all phases. For optimum operation and life, the tube should be protected from high VSWR's by the use of a circulator.

6. The electromagnet current is adjusted for correct anode current. Refer to installation and operating instructions for more detail.

7. Other operating conditions are possible. Refer to installation and operating instructions or call the factory for more information.
Fixed Frequency L-Band Magnetron

(2) 5/16 FLARE FITTING
HEATER CONNECTOR

NOTE:
1. ORIENTATION OF AIR INPUT AND FLEXIBLE LEAD IS ADJUSTABLE.
2. REVERSING CLAMP SCREW FORCES CONNECTOR OPEN.
3. CONNECTOR HAS INTERNAL STOPS FOR LOCATION ON THE TUBE.

$\frac{5}{16}$ SPADE LUG

CATHODE CONNECTOR

NOTE: REVERSING CLAMP SCREW FORCES CONNECTOR OPEN.

$\frac{5}{16}$ SPADE LUG

FIGURE 6