JETEC TYPE DESIGNATION REGISTRATION FORM

ATR TUBES

Manufacturer's Designation: BL-54
JETEC Designation: 6629
Manufacturer: Bomac Laboratories, Inc.
Beverly, Massachusetts

March 7, 1957

GENERAL CHARACTERISTICS

The 6629 is a broad band ATR tube designed to effectively decouple the transmitter from a common transmitting and receiving antenna during a non-transmitting period. It is designed to operate over a frequency range from 8650 to 8950 megacycles.

ELECTRICAL DATA-TYPICAL VALUES

Center Frequency 8800 Mc/sec.
Operation Band at VSWR 12 minimum 8760 to 8840 Mc/sec.
Loaded Q (max.) 6.5
Transmitter Peak Power (max) 250 kw
Transmitter Peak Power (min.) 5 kw
Equivalent Conductance (max.) 0.1
Tuning Susceptance (max.) ±0.06
Arc Power Loss (max.) 0.8 db
F=8800 Mc; p0=4.0 kw;
tp=0.5μs; prr=1000 pps
Recovery Time (max.) 8.0 μsec
F=8800 Mc; p0=50 kw;
tp=1.0 μsec; prr=1000 pps.

MECHANICAL DATA - GENERAL

Mounting Position Any
Weight, approximately 1.2 oza.

ABSOLUTE MAXIMUM RATINGS

Transmitter Peak Power 250 kw
Transmitter Average Power 250 W

OUTLINE DRAWING

Outline as per attached drawing dated 12-8-54
Mounting Seat as per attached drawing dated 10-1-54

from JETEC release #1906, April 22, 1957
<table>
<thead>
<tr>
<th>Ref.</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>A*</td>
<td>1.200 Max.</td>
</tr>
<tr>
<td>B</td>
<td>0.145</td>
</tr>
<tr>
<td>C</td>
<td>1.000</td>
</tr>
<tr>
<td>D*</td>
<td>0.781</td>
</tr>
<tr>
<td>E</td>
<td>0.500</td>
</tr>
<tr>
<td>F**</td>
<td>0.093</td>
</tr>
<tr>
<td>G**</td>
<td>1/4 Max.</td>
</tr>
<tr>
<td>H*</td>
<td>1.500±0.003</td>
</tr>
<tr>
<td>J</td>
<td>#18(1/1695) Dr. 2 Holes</td>
</tr>
<tr>
<td>K**</td>
<td>3/16 Rad.</td>
</tr>
<tr>
<td>L**</td>
<td>0.030 Rad. Max.</td>
</tr>
</tbody>
</table>

**SPECIFICATION SHEET**

Outline 6304/BL-43
6629/BL-54, 6630/BL-55

12-8-54 clr
NOTES
1. Design of holder optional
2. Tube held firmly in place by screw clamp
3. Bottom of tube is to be approx. flush (+.004) with inside surface of waveguide.