JEtec Type Designation Registration Form

TR Tubes

Manufacturer's Designation: BL-28  December 10, 1956
JEtec Designation: 6568
Manufacturer: Bomac Laboratories, Inc.
Beverly, Massachusetts

General Characteristics

The 6568 is a broad-band TR tube designed to effectively decouple the receiver from a common transmitting and receiving antenna during a period of transmission. It is an integral cavity type. Its operational band is from 5395 to 5905 megacycles per second.

Electrical Data - Typical Values

Operational Band
  VSWR 1.9 maximum  5395 to 5905 Mc/s
  VSWR 1.4 maximum  5450 to 5825 Mc/s
Ignitor Ignition Time (max.)  5 sec.
Ignitor Voltage Drop at li = 100 uAdc.  200 to 400 Vdc.
Spike Leakage Energy (max.)  0.25 ergs.
  F = 5650 Mc; po = 10 kw
  tpl = 1.0 usec; tp2 = 0.5 usec.
  prr = 1000 pps; li = 100 uAdc.
Flat Leakage Power (max.)  70 mw.
(See Spike Leakage for test conditions)
Insertion Loss (max.) li = 0.  0.8 db.
Ignitor Interaction (max.) li = 100 uAdc.  0.2 db.
Recovery Time (max.) at 100 kw peak  3 db down  6.0 usec.
Position of Short (F = 5650 Mc.) Note 1
  At 10 kw peak  0.095 to 0.115 in.
  At 100 kw peak  0.080 to 0.100 in.
(Position of short is measured from the input flange face and is further from the magnetron within indicated limits.)

Mechanical Data - General

Mounting Position  Any
Weight, approximately  1 3/4 lbs.

From JETEC release #1873, March 18, 1957
ABSOLUTE MAXIMUM RATINGS

Transmitter Peak Power
3000 kw.

Transmitter Average Power
4500 W.

Ignitor Current
200 ma.

OUTLINE DRAWING

See attached drawing dated 11-24-54.

Note 1: The input of the tube is to mate with a UG 148 A/U or equivalent narrow band choke flange.
Exhaust tube not to extend beyond edge of flange.

Miniature Cap
not to extend beyond edge of flange

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Dimensions</th>
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<tbody>
<tr>
<td>A</td>
<td>3-5/8 Dia.</td>
</tr>
<tr>
<td>B</td>
<td>1/4</td>
</tr>
<tr>
<td>C**</td>
<td>.250 Dia.</td>
</tr>
<tr>
<td>D</td>
<td>2.110 ± .010</td>
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<tr>
<td>E**</td>
<td>45°</td>
</tr>
<tr>
<td>F**</td>
<td>3.250 Dia. B.C.</td>
</tr>
<tr>
<td>G</td>
<td>#10-32 NF (4) holes equally spaced.</td>
</tr>
<tr>
<td>H</td>
<td>7/32 Dia. (4) holes equally spaced</td>
</tr>
<tr>
<td>J**</td>
<td>7/32 Max.</td>
</tr>
<tr>
<td>K</td>
<td>.395</td>
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