

JETEC TYPE DESIGNATION REGISTRATION FORM

ATR TUBE

Manufacturer's Designation: BL-43 April 24, 1957
JETEC Designation: 6304
Manufacturer: Bomac Laboratories, Inc.
Beverly, Massachusetts

GENERAL CHARACTERISTICS

The 6304 is a broad-band ATR tube designed to effectively decouple the transmitter from a common transmitting and receiving antenna during a non-transmitting period designed to operate over a frequency range 9000 to 9600 megacycles.

ELECTRICAL DATA - TYPICAL VALUES

| | |
|---|--------------|
| Center Frequency | 9300 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=9300 Mc, po=4.0 kw, tp=0.5 μs; prr=1000 pps. | |
| Recovery Time (max.) | 8 μsec |
| F=9300 Mc; po=50 kw; tp=1.0 μs; prr=1000 pps | |

MECHANICAL DATA - GENERAL

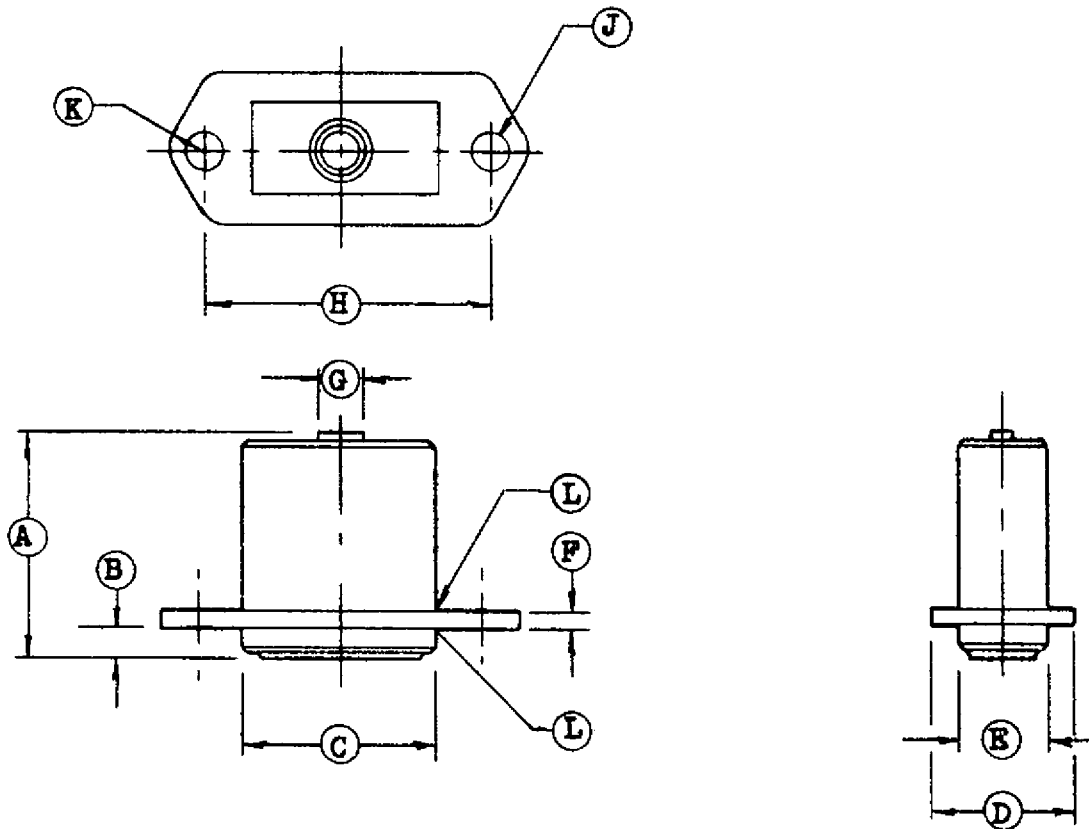
| | |
|-----------------------|----------|
| Mounting Position | Any |
| Weight, approximately | 1.0 ozs. |

ABSOLUTE MAXIMUM RATINGS

| | |
|---------------------------|--------|
| Transmitter Peak Power | 250 kw |
| Transmitter Average Power | 250 W |

OUTLINE DRAWINGS

Outline per attached drawing date 12-8-54
Tube Mount per attached drawing date 12-2-54



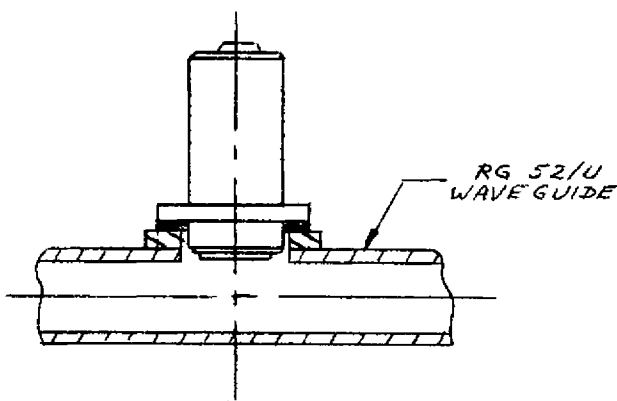
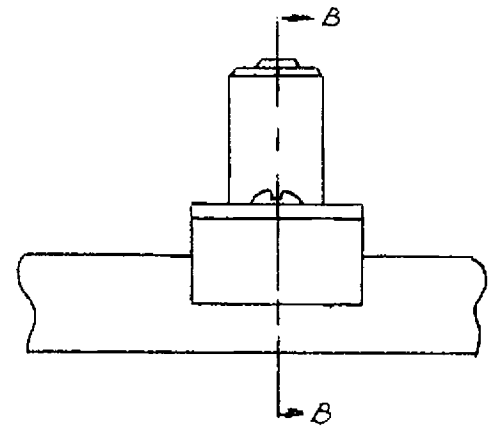
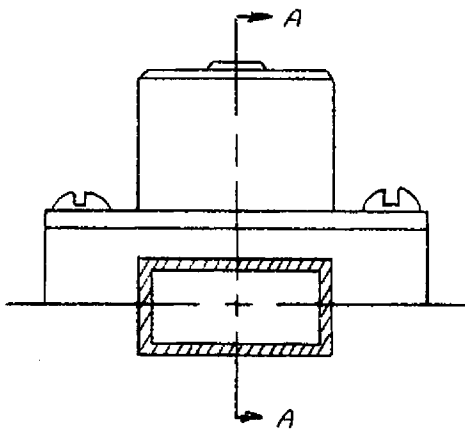
| Ref. | Dimension |
|------|------------------------|
| A* | 1.200 Max. |
| B | 0.145 |
| C | 1.000 |
| D* | 0.781 |
| E | 0.500 |
| F** | 0.093 |
| G** | 1/4 Max. |
| H* | 1.500±.003 |
| J | #18(.1695) Dr. 2 Holes |
| K** | 3/16 Rad. |
| L** | 0.030 Rad. Max. |

SPECIFICATION SHEET

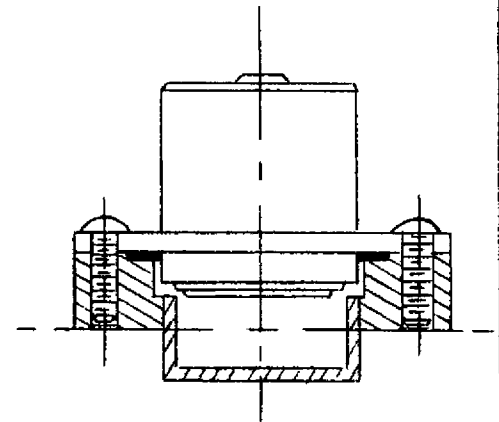
Outline 6304/BL-43
6629/BL-54, 6630/BL-55,

BOMAC LABORATORIES INC.
SALEM ROAD
BEVERLY, MASSACHUSETTS

12- 8-54 clr



SECTION A-A OF SEAT
SHOWING TUBE IN POSITION



SECTION B-B OF SEAT
SHOWING TUBE IN POSITION

NOTES:—

1. DESIGN OF HOLDER OPTIONAL
2. TUBE HELD FIRMLY IN PLACE BY SCREW CLAMP
3. BOTTOM OF TUBE IS TO BE APPROX. FLUSH (± 0.004) WITH INSIDE SURFACE OF WAVEGUIDE.

| | | |
|-------------------------|----------------------------|--|
| GS-2E-1.10.30.06 | SPECIFICATION SHEET | BOMAC LABORATORIES INC. SALEM ROAD BEVERLY, MASSACHUSETTS 12-2-54 \otimes |
| | TUBE MOUNTING | |
| 6309/BL-43 | | |