

# JETEC TYPE DESIGNATION REGISTRATION FORM

## TR TUBES

Manufacturer's Designation: BL-35 March 4, 1957  
JETEC Designation: 6560  
Manufacturer: Bomac Laboratories, Inc.  
Beverly, Massachusetts

### GENERAL CHARACTERISTICS.

The 6560 (BL-35) is a dual broad-band gas switching tube designed to operate with suitable short-slot hybrid junctions to provide a balanced duplexer using RG91/U size waveguide. It is an integral cavity type. Its operational band is from 15,000 to 17,000 megacycles.

### ELECTRICAL DATA-TYPICAL VALUES.

Operational Band  
    VSWR 1.4 maximum 15,000 to 17,000 Mc/s  
    VSWR 1.2 maximum 15,060 to 16,940 Mc/s  
Ignitor Ignition Time (max.) each electrode 5 sec.  
Ignitor Voltage Drop at  $I_i=100\mu\text{A}$ dc 200-475 volts  
    (each electrode)  
Spike Leakage Energy (max.) 0.10 ergs  
     $F=16,000\text{ Mc}$ ;  $p_o=20\text{ kw}$ ;  
     $t_{p1}=0.5\mu\text{sec}$ ;  $t_{p2}=0.25\mu\text{sec}$ ;  
     $\text{prf}=3000\text{ pps}$ ;  $I_i=100\mu\text{A}$ dc each electrode  
Flat Leakage Power (max.) 20 mw  
    (See Spike Leakage Energy for test conditions)  
Duplexer Loss (max.)  
    15,000 to 17,000 Mc and  $I_i=100\mu\text{A}$ dc each electrode 1.4 db  
    15,060 to 16,940 Mc and  $I_i=100\mu\text{A}$ dc each electrode 1.2 db  
Isolation (max.)  
    15,000 to 17,000 Mc and  $I_i=100\mu\text{A}$ dc each electrode 10 db  
    15,060 to 16,940 Mc and  $I_i=100\mu\text{A}$ dc each electrode 12 db  
Recovery Time(max.) at 90kw peak 3 db down  $10\mu\text{sec}$ .  
High Level VSWR (max.) 1.2  
     $F=16,000\text{ Mc}$ ;  $p_o=20\text{ kw}$  peak;  
     $t_{p1}=0.5\mu\text{sec}$ ;  $\text{prf}=3000\text{ pps}$ ;  
     $I_i=100\mu\text{A}$ dc. each electrode

### MECHANICAL DATA- GENERAL.

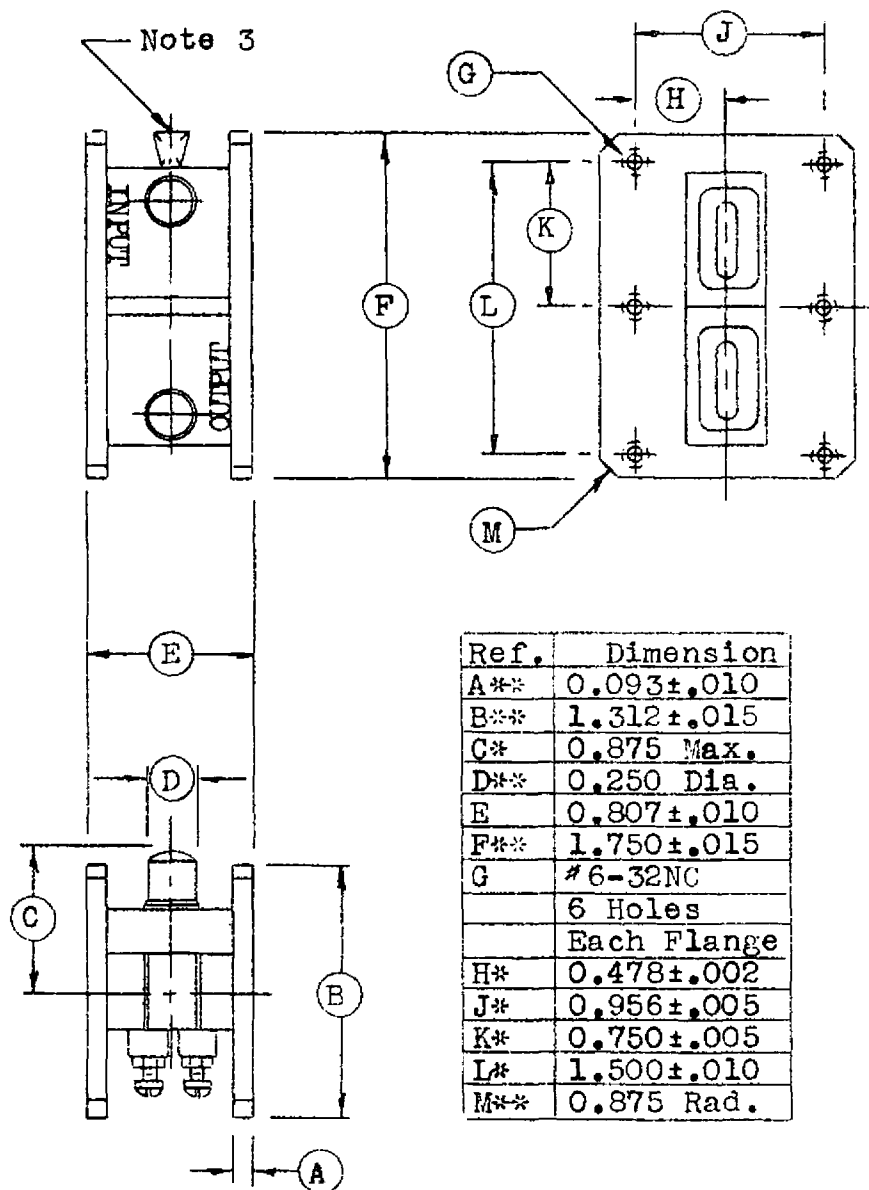
Mounting Position Any  
Pressurization (max.) 30 lbs. gauge  
Weight, approximately 3 ounces

**ABSOLUTE MAXIMUM RATINGS.**

|                           |               |
|---------------------------|---------------|
| Transmitter Peak Power    | 100 kw        |
| Transmitter Average Power | 67 W          |
| Ignitor Current           | 200 $\mu$ Adc |

**OUTLINE DRAWINGS.**

Tube outline as per attached drawing dated 6-29-56  
Mating flange as per attached drawing dated 6-29-56



Note 1:- Etch INPUT and OUTPUT of tube on top cap spacer.  
 Note 2:- Rhodium flash over silver plating is optional.  
 Note 3:- Exhaust tube not to extend beyond flanges.

## SPECIFICATION SHEET

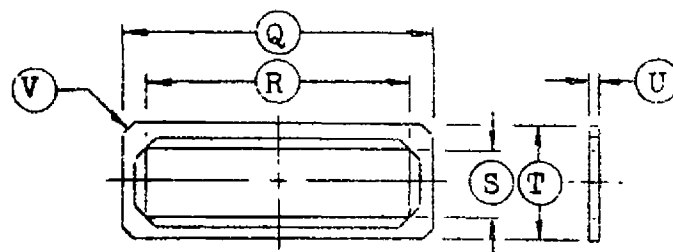
Outline

6560/BL- 35

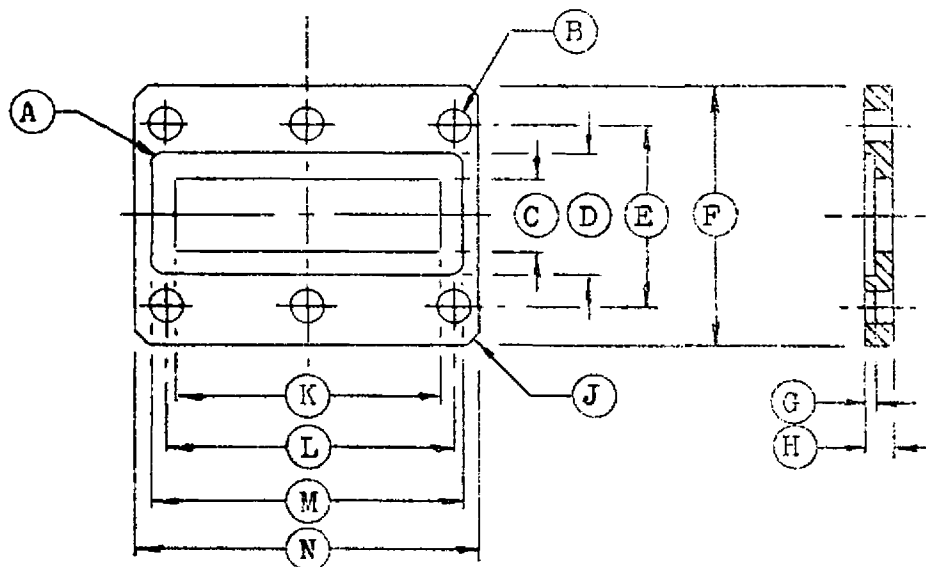
BOMAC LABORATORIES INC.  
 SALEM ROAD  
 BEVERLY, MASSACHUSETTS

6-29-56

clr



Gasket



Mating Flange

| Ref. | Dimension             |
|------|-----------------------|
| A    | 1/16 Rad.             |
| B    | #26(.147) Dr. 6 Holes |
| C    | 0.394+.002-.000       |
| D    | 0.656                 |
| E    | 0.956±.004            |
| F    | 1 5/16                |
| G    | 0.023±.001            |
| H    | 3/32                  |
| J    | 7/8 Rad.              |
| K    | 1.364+.002-.000       |
| L    | 1.500±.004            |
| M    | 1.625                 |
| N    | 1 3/4                 |
| Q    | 1 37/64               |
| R    | 1.384±.005            |
| S    | 0.431±.005            |
| T    | 39/64                 |
| U    | 0.037±.005            |
| V    | 1/32 x 45°            |

GS-2E-1.10.20.02

## SPECIFICATION SHEET

Mating Flange and Gasket

6560/BL- 35

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