

# 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  
 $F=16,000\text{ Mc}$ ;  $p_o=20\text{ kw}$ ;  
 $t_{p1}=0.5\mu\text{sec}$ ;  $t_{p2}=0.25\mu\text{sec}$ ;  
 $p_{rr}=3000\text{ pps}$ ;  $I_i=100\mu\text{A dc}$  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  
 $F=16,000\text{ Mc}$ ;  $p_o=20\text{ kw peak}$ ;  
 $t_{p1}=0.5\mu\text{sec}$ ;  $p_{rr}=3000\text{ pps}$ ;  
 $I_i=100\mu\text{A dc}$ . 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**

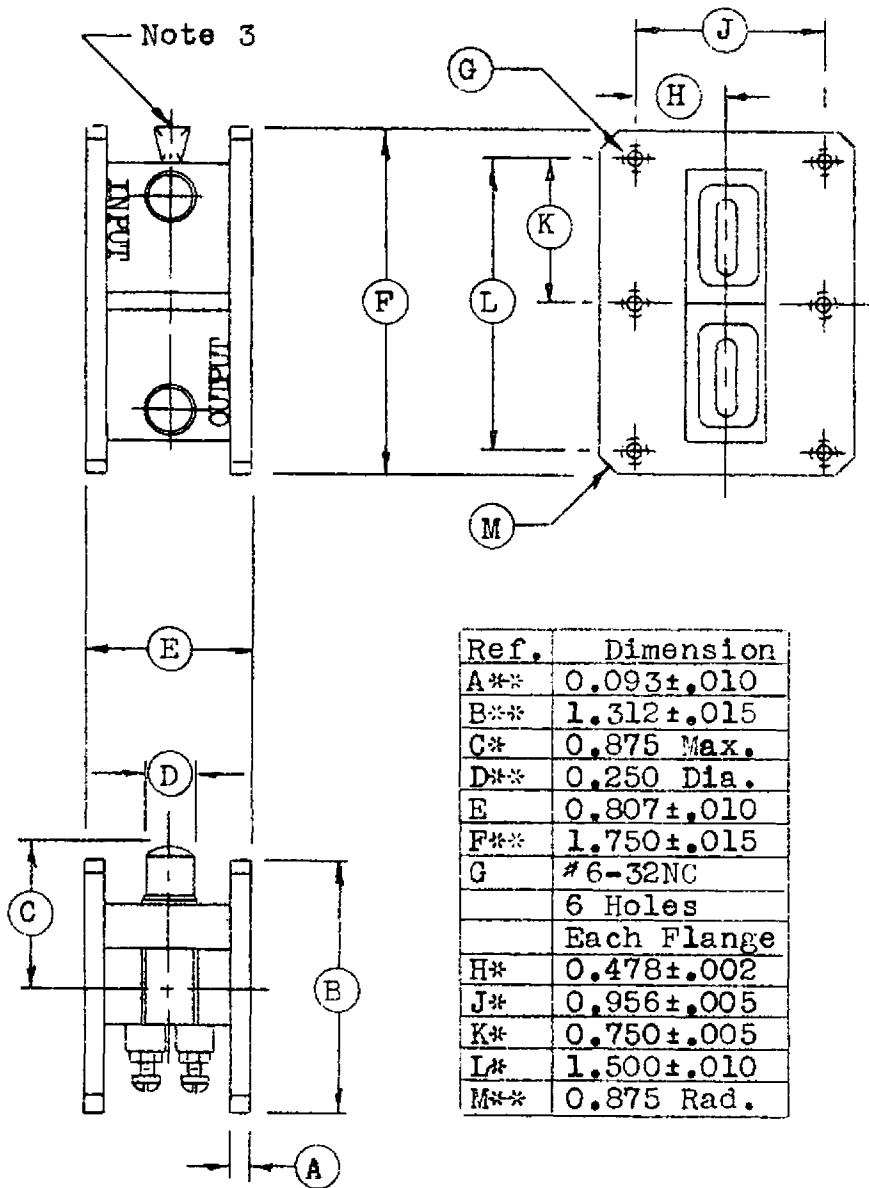
**Ignitor Current**

**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.

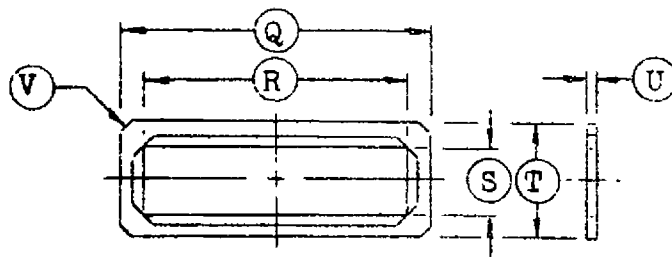
## SPECIFICATION SHEET

Outline

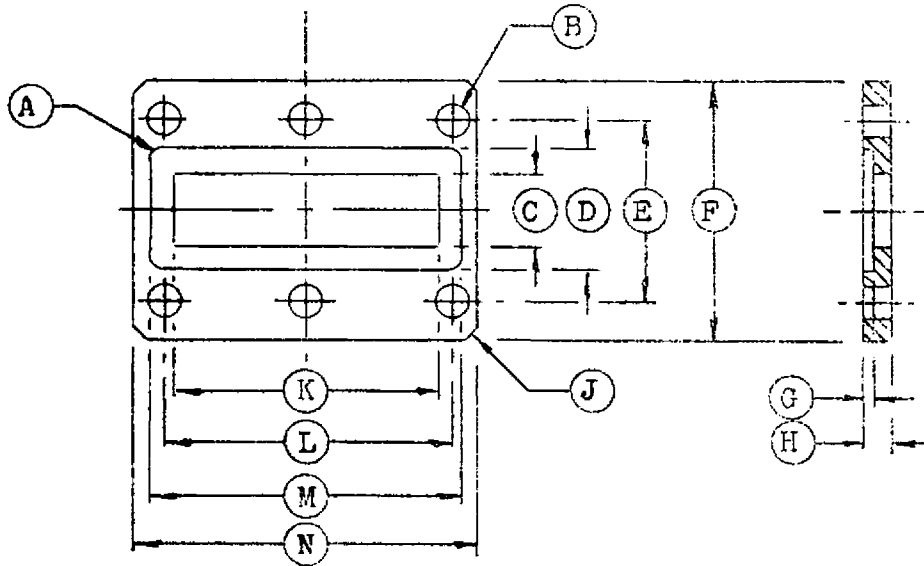
6560/BL- 35

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

	<b>SPECIFICATION SHEET</b>		BOMAC LABORATORIES INC. SALEM ROAD BEVERLY, MASSACHUSETTS
	Mating Flange and Gasket 6560/BL- 35		6-29-56    clr