

TYPE DESIGNATION REGISTRATION FORM

TR TUBE

Manufacturer: Bomac Laboratories, Inc.
 Beverly, Massachusetts

Mfr's Tube No. BL-71

Tentative JETEC Type No. 6564

The 6564 (BL-71) is a dual broad-band gas switching tube designed to operate with suitable short-slot hybrid junctions to provide a balanced duplexer using RG51/U waveguide. It is an integral cavity type with an operational band from 8500 to 9600 megacycles per second.

ELECTRICAL DATA- GENERAL

Operational Band	8500 to 9600 Mc.
Voltage Standing Wave Ratio	1.2 max.
Ignitor Starting Voltage	-700 Vdc max.
Ignitor Voltage Drop at 100 μ Adc of ignitor current	200 to 375 Vdc.
Spike Leakage Energy	0.1 erg max.
$p_o = 40$ kw; $p_{rr} = 1000$ pps;	
$F = 9000$ Mc; $t_{p1} = 1.0$ μ s	
$t_{p2} = 0.5$ μ s; $I_i = 100$ μ Adc.	
Flat Leakage Power	20 mw max.
See Spike Leakage Energy	
Duplexer Loss at $I_i = 100$ μ Adc	
Operating Range 8500 to 9600 Mc.	1.0 db max.
" " 8800 to 9300 Mc.	0.8 db max.
Isolation (Antenna to Transmitter)	
Operating Range 8500 to 9600 Mc.	15 db min.
Recovery Time at 200 kw peak: 3 db down	7 μ s max.

MECHANICAL DATA - GENERAL

Mounting Position	Any
Number of Ignitors	Two
Ambient Temperature Range (non-operating)	-40 to \neq 100°C
Net weight, approximately	7 oz.

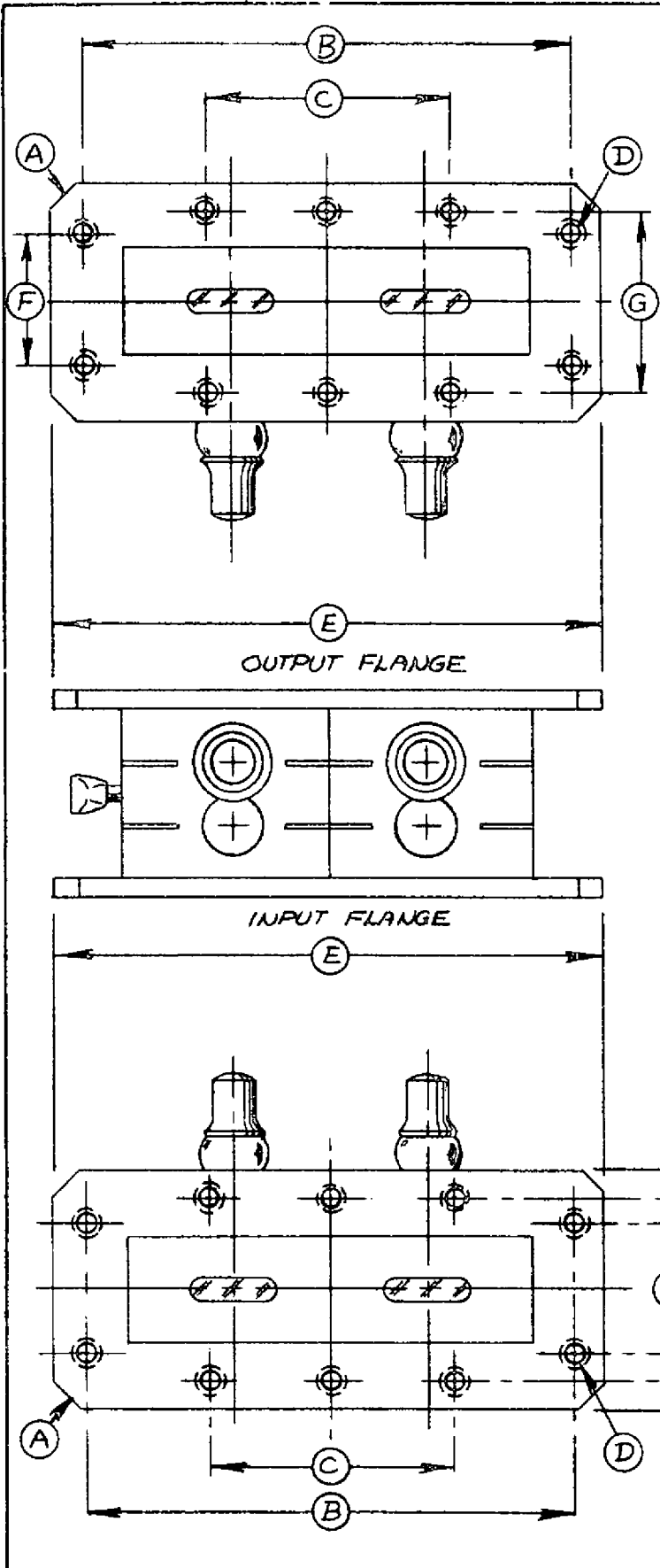
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MAXIMUM RATINGS

Transmitter Peak Power	500 kw
Ignitor Current	200 μ Adc

OUTLINE DRAWING

Tube outline as per attached drawing dated 9/7/54.
Mating flange as per attached drawing dated 12/13/54.



REF	DIMENSIONS
A**	1/8 x 45° APPROX
B*	2.892
C*	1.448
D	#8-32 TAP (10) HOLES EA FIG
E**	3 7/32
F*	.722
G*	1.080
H**	1 8/16
J**	1/8
K	1.272 ±0.10
L*	1 3/8 MAX
M**	.250 NOM

OUTPUT FLANGE

INPUT FLANGE

NOTE :- EXHAUST STEM NOT TO EXTEND BEYOND FLANGES

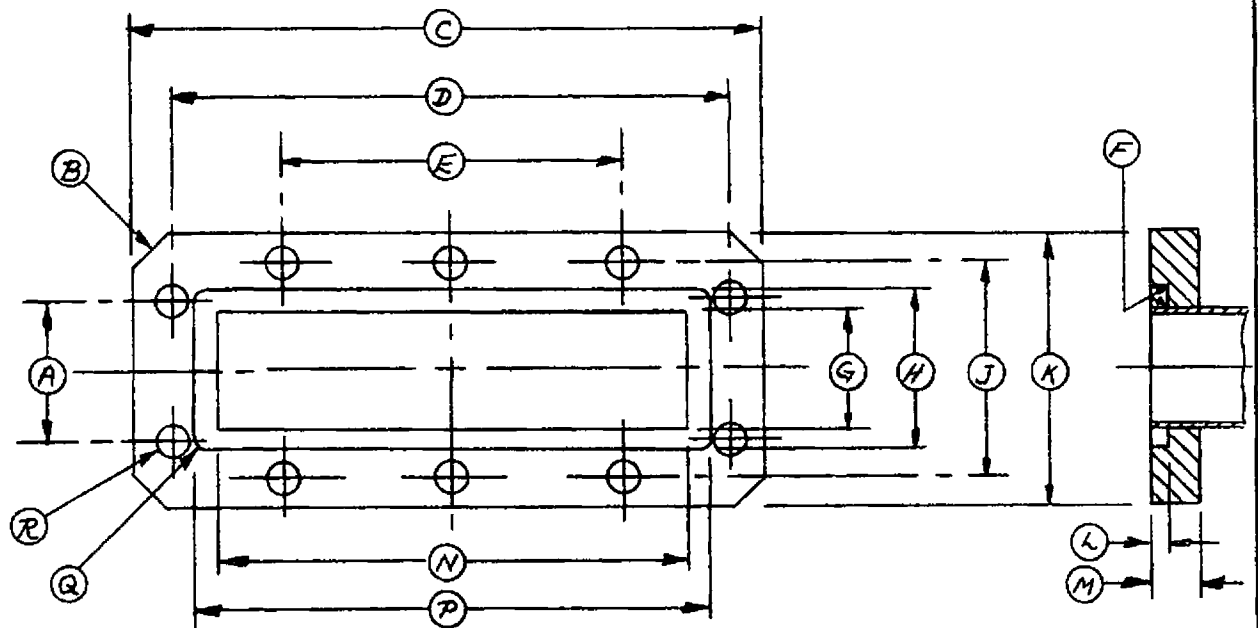
SPECIFICATION SHEET

OUTLINE
6564/BL-71

BOMAC LABORATORIES INC.
SALEM ROAD
BEVERLY, MASSACHUSETTS

9-7-54

E.D.



REF	DIMENSION
A	.722 ±.004
B	.120 X 45° CHAMFER OR 1/8" R.
C	3.210
D	2.892 ±.008
E	1.448 ±.008
F	.005" R. MAX
G	.628 ±.007
H	.872 ±.004
J	1.080 ±.004
K	1.380
L	.069 ±.002
M	.250
N	2.440 ±.002 ±.001
P	2.684 ±.004
Q	.046 ±.002 R.
R	*17(.173) DR. (10) HOLES

SPECIFICATION SHEET

MATING FLANGE

6564/BL-71

BOMAC LABORATORIES INC.
SALEM ROAD
BEVERLY, MASSACHUSETTS

12-13-54

R