JETEC TYPE DESIGNATION REGISTRATION FORM

DUAL TR TUBES

Manufacturer's Designation: BL-600
JETEC Designation: 6642
Manufacturer: Bomac Laboratories, Inc.
Beverly, Massachusetts

March 12, 1957

GENERAL CHARACTERISTICS

The 6642 is a broad-band dual TR tube designed to operate with suitable short-slot hybrid junctions to provide a balanced duplexer using RG-51/U size waveguide input and RG-52/U size waveguide output. It is an integral cavity type with fixed tuned gaps. Its operational band is from 8490 to 9578 megacycles.

ELECTRICAL DATA-TYPICAL VALUES

Operational Band	
VSWR 1.4 maximum	8490 to 9578Mc/sec.
VSWR 1.2 maximum	8565 to 9487Mc/sec.
Ignitor Ignition Time (max.)	5 sec.
Ignitor Voltage Drop at Ii=100μAdc (each electrode)	200-375 volts
Spike Leakage Energy (max.) F= 9000Mc; po=40kw; tp1=1.0μs; tp2=0.5μs; prr=1000pps Ii=100μAdc on each electrode	0.1 ergs
Flat Leakage Power (max.) (see Spike Leakage for test conditions)	20 mw
Duplexer Loss (max.) Ii=100μAdc on each electrode	
from 8490 to 9578Mc	1.1 db
from 8565 to 9487Mc	0.9 db
Isolation (min.)	
from 8490 to 9578Mc.	15 db
from 8565 to 9487Mc.	17 db
at 9000Mc.	20 db
Recovery Time (max.) at 200kw peak 3 db down	7μsec.
High Level VSWR max. F=9000Mc, po=40kw; tp=1.0μs prr=1000pps; Ii=100μAdc on each electrode	1.2

from JETEC release #1919, May 6, 1957

MECHANICAL DATA - GENERAL

Mounting Positions	Any
Number of Electrodes	Two
Weight, approximately	0.5 lbs.

ABSOLUTE MAXIMUM RATINGS

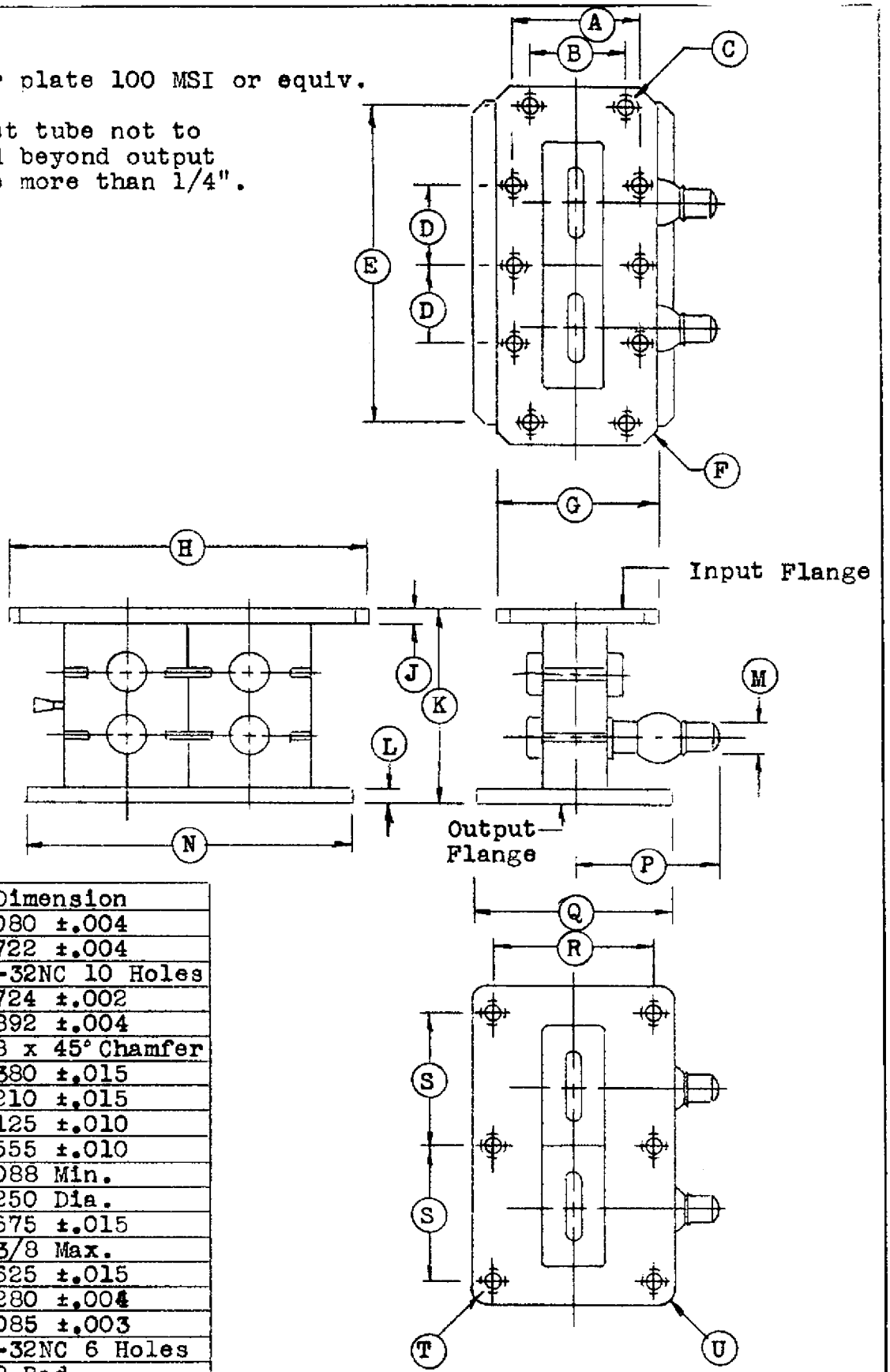
Transmitter Peak Power	250 kw
Transmitter Average Power	250 W
Ignitor Current	200 μAdc

OUTLINE DRAWINGS

Outline as per attached drawing dated 6-15-56.
Input Mating Flange as per attached drawing dated 3-4-57.
Output Mating Flange as per attached drawing dated 11-10-54.

Silver plate 100 MSI or equiv.

Exhaust tube not to extend beyond output flange more than 1/4".



Ref.	Dimension
A*	1.080 ±.004
B*	0.722 ±.004
C	#8-32NC 10 Holes
D*	0.724 ±.002
E*	2.892 ±.004
F**	1/8 x 45° Chamfer
G**	1.380 ±.015
H**	3.210 ±.015
J**	0.125 ±.010
K	1.555 ±.010
L**	0.088 Min.
M**	0.250 Dia.
N**	2.575 ±.015
P*	1 3/8 Max.
Q**	1.625 ±.015
R*	1.280 ±.004
S*	1.085 ±.003
T	#8-32NC 6 Holes
U**	1/8 Rad.

SPECIFICATION SHEET

Outline

6642/BL-600

BOMAC LABORATORIES INC.
SALEM ROAD
BEVERLY, MASSACHUSETTS

6-15-56 clr

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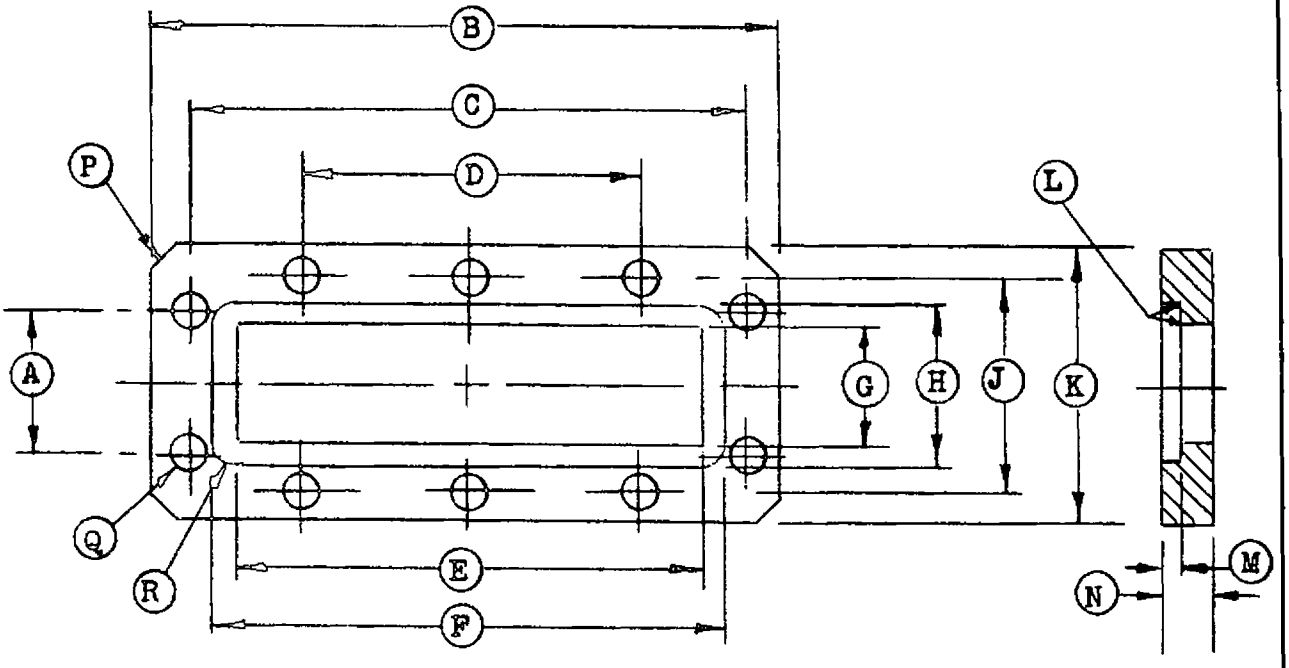
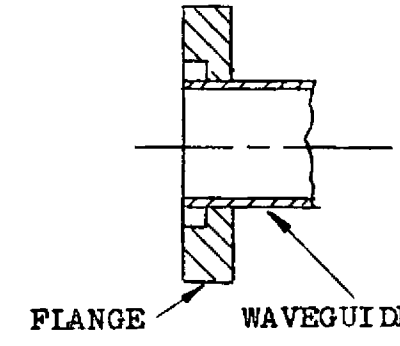


Ref.	Dimensions
A	.722 ±.004
B	3.210
C	2.892 ±.008
D	1.448 ±.008
E	2.440 +.002 -.001
F	2.684 ±.004
G	.628 +.002 -.001
H	.872 ±.004
J	1.080 ±.004
K	1.380
L	.005 R. Max.
M	.069 ±.002
N	.250
P	.120 x 45° chamfer
	or 1/8 R.
Q	17 (.173) Dr.
	(10) holes
R	.046 R. ±.002



Flange used for following
6601/BL-327
6642/BL-600
BL-335
BL-341
BL-655
6598/BL-321
6564/BL- 71

	SPECIFICATION SHEET	BOMAC LABORATORIES INC. SALEM ROAD BEVERLY, MASSACHUSETTS
	MATING FLANGE	
OS-2E-1.10.20.07		3-4-57 R.R.

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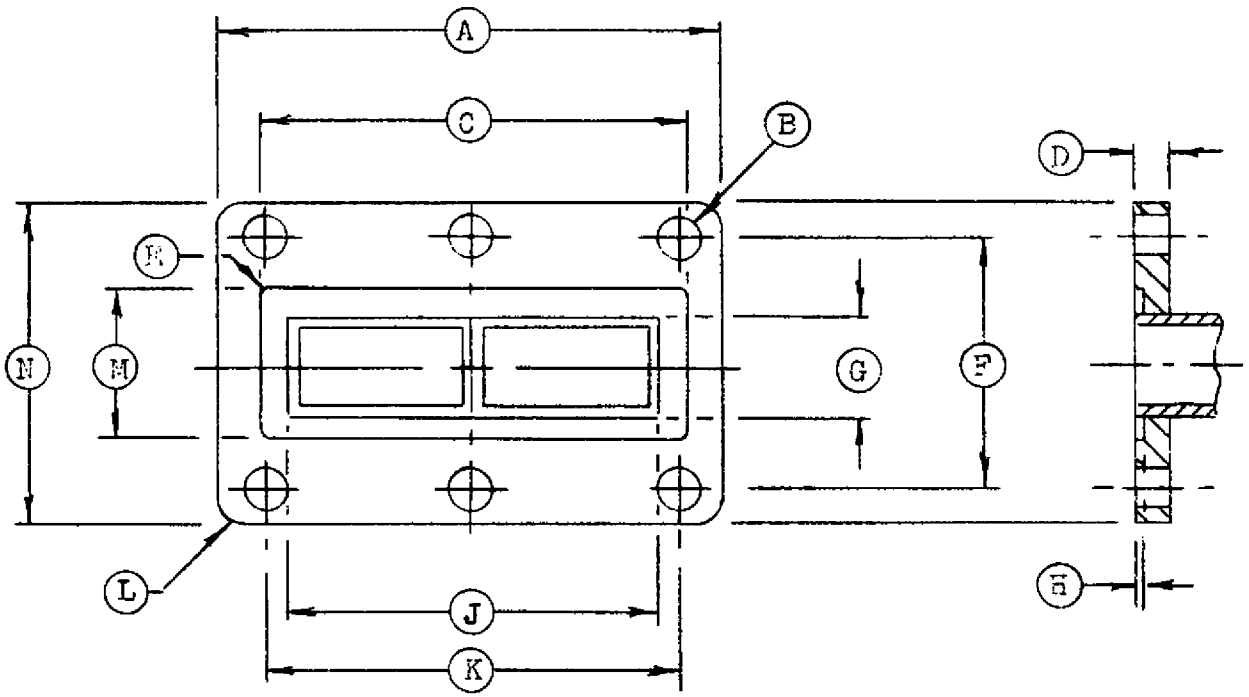

Ref.	Dimension
A	2.575 ±.015
B	#18(.1695) Dr.
	6 Holes
C	2.203 +.005 -.000
D	0.220 ±.010
E	3/64 Rad.
F	1.280 ±.004
G	0.500 ±.003
H	0.070 ±.001
J	1.950 ±.004
K	2.170 ±.006
L	0.120 Rad. Approx.
M	0.753 +.005 -.000
N	1.625 ±.015

This outline used for following tubes:-

BL-78, BL-307, 6599/BL-322, BL-331, BL-655

6796, 6601/BL-327, 6642/BL-600, BL-335,

BL-341, BL-339H, BL-649, BL-651H, BL-686H

6647/ BL 604H

	SPECIFICATION SHEET	BOMAC LABORATORIES INC. SALEM ROAD BEVERLY, MASSACHUSETTS
GS-2E-1.10.20.10	Mating Flange	11-10-54 clr

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