

JETEC TYPE DESIGNATION REGISTRATION FORM

DUAL TR TUBES

Manufacturer's Designation: BL-60
JETEC Designation: 6640
Manufacturer: Bomac Laboratories, Inc.
Beverly, Massachusetts

March 12, 1957

GENERAL CHARACTERISTICS

The 6640 is a dual broad-band gas switching tube designed to operate with suitable short-slot hybrid junctions to provide a balanced duplexer using RG49/U size waveguide. It is an integral cavity type. Its operational band is from 5400 to 5900 megacycles per second.

ELECTRICAL DATA-TYPICAL VALUES

Operational Band	
VSWR 1.3 maximum	5400 to 5900Mc/sec
VSWR 1.2 maximum	5450 to 5850 Mc/sec
Ignitor Ignition Time (max.)	5 sec.
Ignitor Voltage Drop at $I_i=100\mu\text{A dc}$ (each electrode)	200-400 Vdc.
Spike Leakage Energy (max.)	0.1 ergs
$F=5650\text{ Mc}$; $p_o=70\text{ kw}$; $t_{p1}=1.0\mu\text{s}$; $t_{p2}=0.5\mu\text{s}$; $p_{rr}=1000\text{ pps}$; $I_i=100\mu\text{A dc}$ on each electrode	
Flat Leakage Power (max.)	10 mw
(See Spike Leakage for test conditions)	
Duplexer Loss (max.) $I_i=100\mu\text{A dc}$ on each electrode	
from 5400 to 5900Mc.	1.2 db
from 5450 to 5850Mc.	1.0 db
Isolation (min.)	
from 5400 to 5900Mc.	15 db
from 5450 to 5850Mc.	17 db
at 5650Mc.	20 db
Recovery Time (max.) at 625 kw peak 3 db down	12 μsec .
High Level VSWR (max.)	1.2
$F=5650\text{ Mc}$; $p_o=300\text{ kw}$; $t_p=1.0\mu\text{s}$; $p_{rr}=1000\text{ pps}$; $I_i=100\mu\text{A dc}$ on each electrode	

MECHANICAL DATA-GENERAL

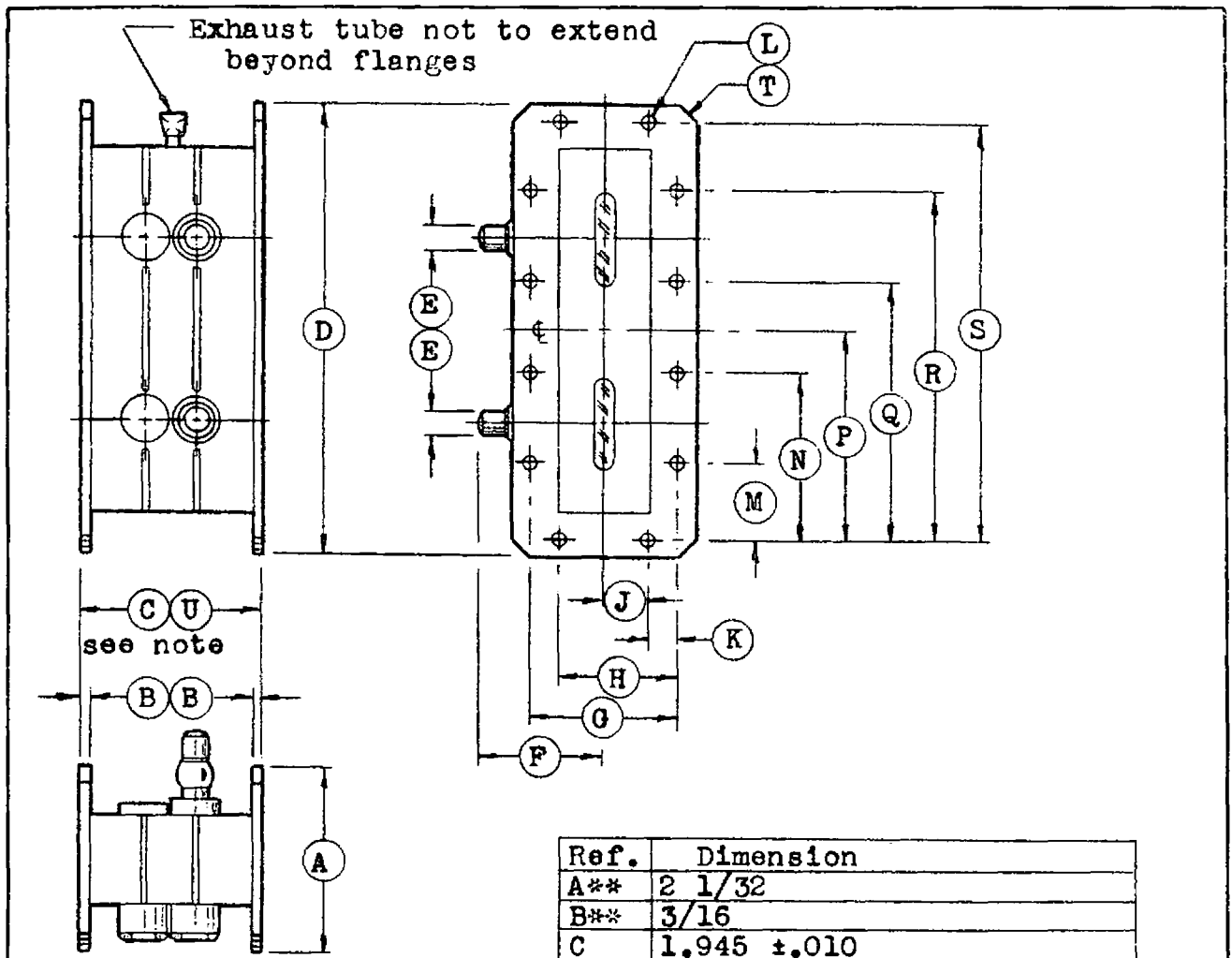
Mounting Position	Any
Number of Electrodes	Two
Weight, approximately	1.25 lbs.

ABSOLUTE MAXIMUM RATINGS

Transmitter Peak Power	700 kw
Transmitter Average Power	700 W
Ignitor Current (each electrode)	200 μ Adc

OUTLINE DRAWINGS

Outline as per attached drawing dated 4-4-57
Mating Flange per attached drawing dated 2-1-55



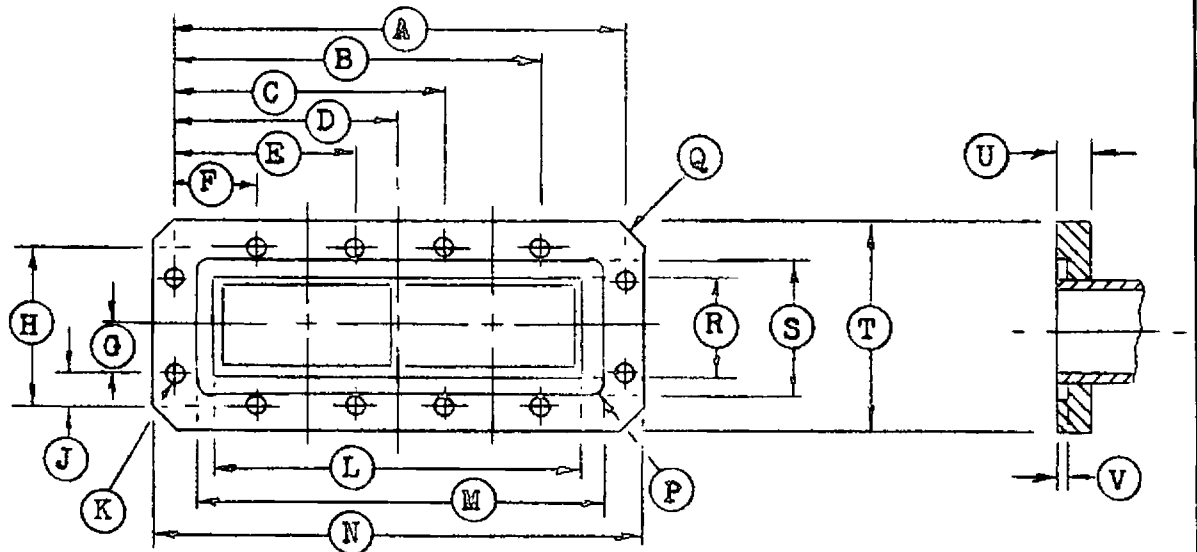
Note:-

Dimension C applies to 6640/BL-60 only.

Dimension U applies to 6641/BL-86 and BL-644 only.

Ref.	Dimension
A**	2 1/32
B**	3/16
C	1.945 ±.010
D**	5 1/32
E**	0.250 Dia. Nom.
F*	1 13/16 Max.
G*	1.658 ±.004
H*	1.329 ±.004
J*	0.500 ±.004
K*	0.329 ±.004
L	#10-32NF 12 Holes Ea. Flg.
M*	0.829 ±.004
N*	1.829 ±.004
P*	2.329 ±.004
Q*	2.829 ±.004
R*	3.829 ±.004
S*	4.658 ±.004
T**	3/16 x 45° Chamfer
U	2.345 ±.015

SPECIFICATION SHEET		BOMAC LABORATORIES INC. SALEM ROAD BEVERLY, MASSACHUSETTS
Outline		
6640/BL-60, 6641/BL-86, BL-644		4-4-57 clr



Ref.	Dimension	Ref.	Dimension
A	4.658 ±.002	L	4.000 ±.005
B	3.829 ±.002	M	4.375 ±.005
C	2.829 ±.002	N	5 1/32
D	2.329 ±.003	P	3/32 Rad.
E	1.829 ±.002	Q	3/16 x 45 Chamfer
F	0.829 ±.002	R	1.000 ±.005
G	0.500 ±.003	S	1.375 ±.005
H	1.658 ±.002	T	2 1/32
J	0.329 ±.003	U	0.350 Min.
K	13/64 (.203) Dr.	V	0.110 ±.002
	12 Holes		

Note:- Outline used for following tubes
 6640/BL-60, 6641/BL-86, BL-336
 BL-352, 6905/BL-613, BL-644

GS-2E-1.10.20.01

	SPECIFICATION SHEET	BOMAC LABORATORIES INC. SALEM ROAD BEVERLY, MASSACHUSETTS
	Mating Flange See Note	
		2-1-55 clr