

JETEC TYPE DESIGNATION REGISTRATION FORM

TR TUBES

Manufacturer's Designation: BL-604
JETEC Designation: 6646
Manufacturer: Bomac Laboratories, Inc.
Beverly, Massachusetts

March 14, 1957

GENERAL CHARACTERISTICS

The 6646 is a dual broad-band gas switching tube designed to operate with a suitable short-slot hybrid junctions to provide a balanced duplexer using RG-52/U size waveguide. 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 $I_i=100\mu\text{A}$ dc (each electrode)	200-375 volts
Spike Leakage Energy (max.) $F=9000\text{Mc}$; $P_o=40\text{kw}$; $t_{p1}=1.0\mu\text{sec}$. $t_{p2}=0.5\mu\text{sec}$; $P_{rr}=1000\text{pps}$; $I_i=100\mu\text{A}$ dc on each electrode	0.1 ergs
Flat Leakage Power (max.) (see Spike Leakage for test conditions)	20 mw
Duplexer Loss (max.) and $I_i=100\mu\text{A}$ dc on each electrode	
from 8490 to 9578Mc.	1.2 db
from 8565 to 9487Mc.	1.0 db
Isolation (min.)	
from 8490 to 9578Mc.	14.0 db
from 8565 to 9487Mc.	16.0 db
at 9000Mc.	18.0 db
Recovery Time (max.) at 100kw peak 3 db down	1.5 μs
High Level VSWR (max.) $F=9000\text{Mc}$; $P_o=40\text{kw}$; $t_p=1.0\mu\text{s}$; $I_i=100\mu\text{A}$ dc on each electrode	1.2

from JETEC release #1919, May 6, 1957

MECHANICAL DATA-GENERAL

Mounting Position	Any
Number of Electrodes	Two
Weight, approximately	10 ounces

ABSOLUTE MAXIMUM RATINGS

Transmitter Peak Power	100kw
Transmitter Average Power	100W
Ignitor Current (each electrode)	200 μ Adc

OUTLINE DRAWINGS

Outline per attached drawing dated 6-29-56

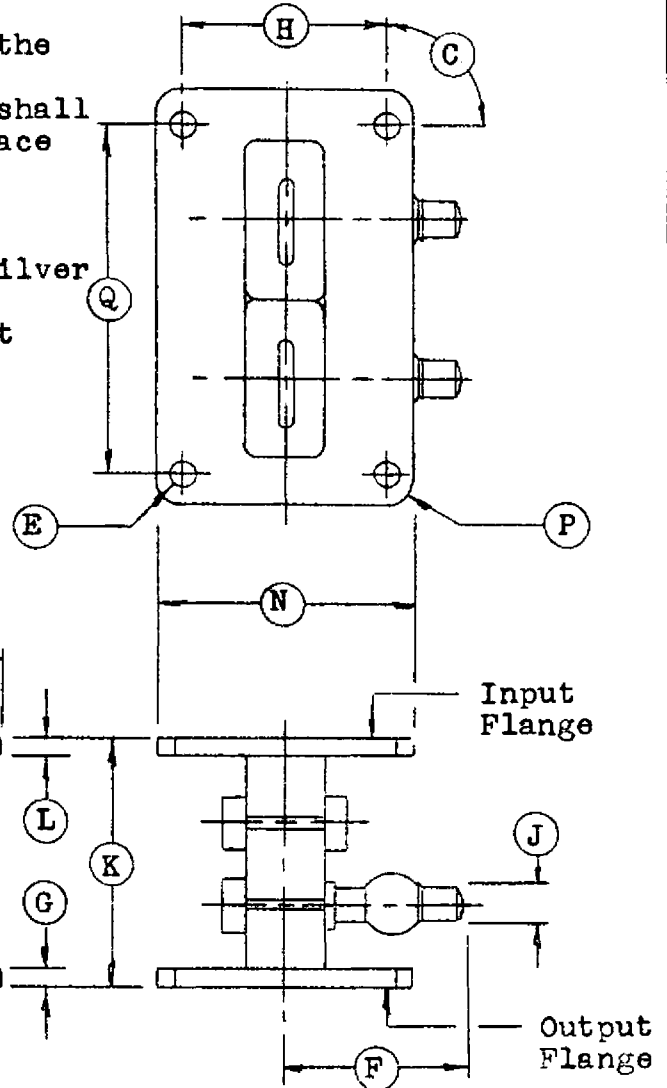
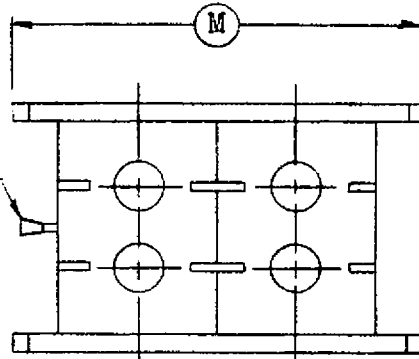
Note 1:- The rect. formed by the four mounting holes on each flange, dimensions (A) and (E) shall be centered on the flange face to within 1/32".

Note 2:- Silver plate 100 MSI or equiv.

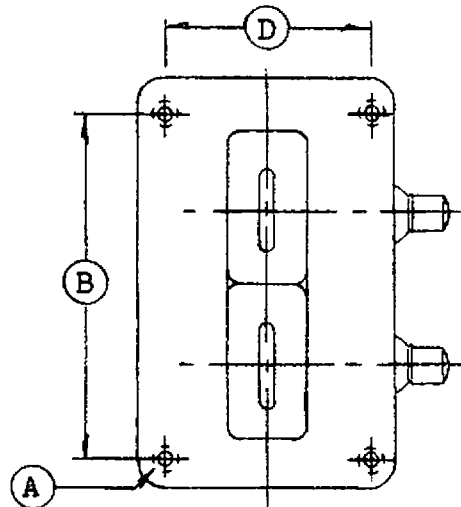
Note 3:- Rhodium flash over silver plating is optional.

Note 4:- Exhaust tube must not extend beyond flange more than 1/4".

Note 4



Ref.	Dimension
A	#8-32NC-1 4 Holes
B*	2.170±.005
C	90° ±5°
D*	1.280±.004
E	#18(.1695) 4 Holes
F*	1 3/8 Max.
G**	0.083 Min.
H*	1.280±.004
J**	0.250 Dia.
K	1.555±.010
L**	0.083 Min.
M**	2.575±.015
N**	1.625±.015
P**	1/8 Rad.
Q*	2.170±.005



SPECIFICATION SHEET

Outline

6646/BL-604, 6334/BL- 27

BOMAC LABORATORIES INC.
SALEM ROAD
BEVERLY, MASSACHUSETTS

6-29-56

clr