

JEDEC TYPE DESIGNATION REGISTRATION FORM

DOUBLE TR TUBE

November 29, 1962

Manufacturer's Designation: BL-625  
JEDEC Designation: 6805  
Manufacturer: Varian Associates, Bomac Division  
Beverly, Massachusetts

GENERAL CHARACTERISTICS

The 6805 is a double broadband TR tube designed to operate in a system which makes use of each half of the tube in separate channels. The description "double" is used rather than "dual" to distinguish it from tubes designed for balanced duplexer operation used in conjunction with a pair of short-slot hybrid couplers. It is for use with RG52/U size waveguide. It is an integral cavity type with fixed tuned elements and has an operational band from 8490 to 9578 megacycles per second.

ELECTRICAL DATA (Note 1)

Operational Band	
VSWR - 1.9 (max)	8490 to 9578 Mc/seconds
VSWR - 1.4 (max)	8565 to 9487 Mc/seconds
Ignitor Ignition Time (max)	5 seconds
Ignitor Current (typical) at Ebb = -650 Vdc (Note 2)	150 $\mu$ Adc
Spike Leakage Energy (max)	0.3 ergs
F=9000 Mc; po = 40 kw; tp = 1.0 $\mu$ s;	
tp2=0.5 $\mu$ s; prr = 1000 pps; Ebb = -650Vdc	
Flat Leakage Power (max)	40 mw
For conditions - see Spike Leakage	
Insertion Loss (max) at F=9000 Mc and Ii = 0	0.7 db
Ignitor Interaction (max) at F=9000 Mc and Ii = 100 $\mu$ Adc	0.2 db
Recovery Time (max.) at 200 kw peak	10 $\mu$ s

ABSOLUTE MAXIMUM RATINGS

Transmitter Peak Power	200 kw
Transmitter Average Power	200 W
Ignitor Current	200 $\mu$ Adc

MECHANICAL DATA - GENERAL

Mounting Position	Any
Number of Electrodes	Two
Weight (approx)	8 ounces

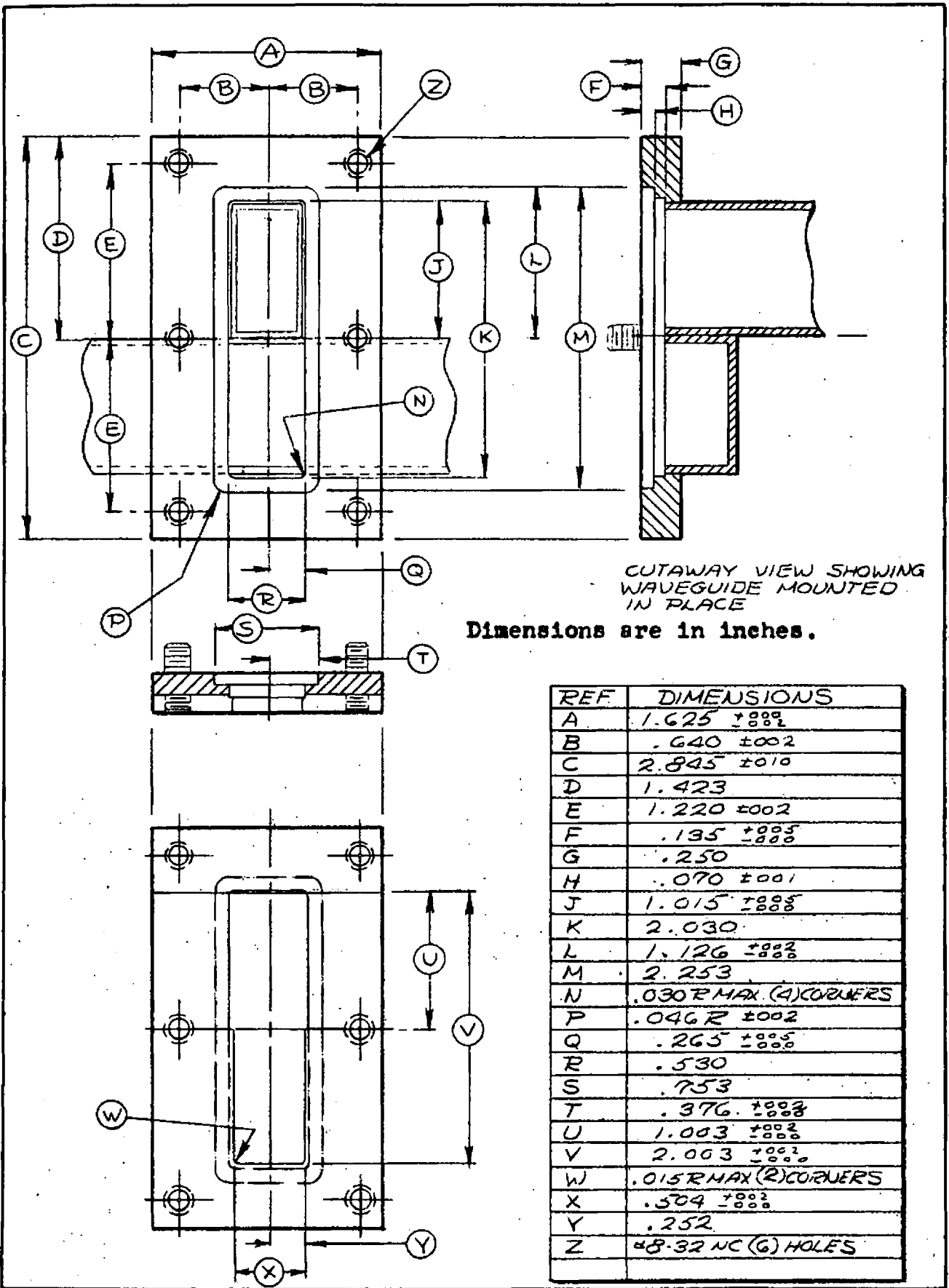
OUTLINE DRAWING

Outline as per attached drawing dated 7-6-56.

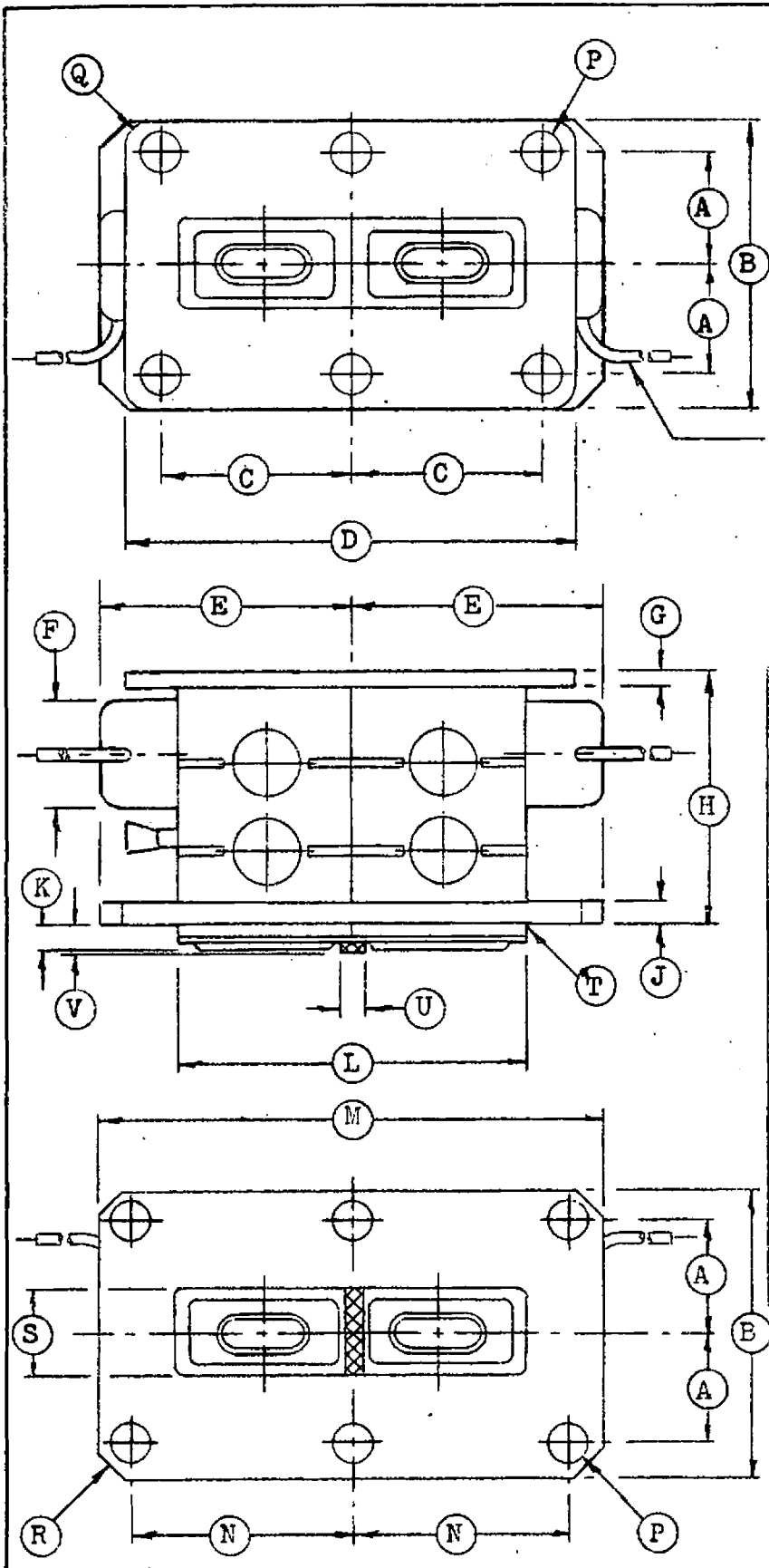
Tube Mounting per attached drawing dated 11-2-54.

Note 1: Each half of the tube is measured as a separate unit.

Note 2: A 2.7 megohm resistor is encapsulated at each ignitor.



SPECIFICATION SHEET		BOMAC LABORATORIES INC. SALEM ROAD BEVERLY, MASSACHUSETTS	
TUBE MOUNTING			
GS-2E-1.10.30.07	6648/BL-615, 6805/BL-625	11-2-54	E.D.



Wire #24(AWG) 19 strand  
 teflon insulated wire  
 spec. Mil-W-16878A-  
 Type EE, 12" long

Ref.	Dimension
A*	0.640±.002
B**	1.625±.010
C*	1.085±.003
D**	2.575±.010
E*	1.500 Max.
F*	0.812 Max.
G**	0.083 Min.
H	1.438±.010
J**	0.125±.010
K	0.125
L	2.005
M**	2.845±.010
N*	1.220±.002
P	#17 (.173) Dr.
	6 Holes Ra. Flg.
Q**	1/8 Rad.
R**	0.125 x 45° Cham.
S	0.500
T	0.030 Rad. Max.
U	0.100±.010
V	0.140 Max.

### SPECIFICATION SHEET

Outline

6805/BL-625

BOMAC LABORATORIES INC.  
 SALEM ROAD  
 BEVERLY, MASSACHUSETTS

7-6-56 clr