

# JETEC TYPE DESIGNATION REGISTRATION FORM

## TR TUBE

Manufacturer's Designation: BL-56  
JETEC Designation: 6649  
Manufacturer: Bomac Laboratories, Inc.  
Beverly, Massachusetts

April 1, 1957

### GENERAL CHARACTERISTICS

The 6649 is a broad-band TR tube designed to effectively decouple the receiver from a common transmitting and receiving antenna during a period of transmission. It is an integral cavity type. Its operational band is from 15.0 to 17.0 kilome gacycles

### ELECTRICAL DATA-TYPICAL VALUES

#### Operational Band

VSWR 1.9 maximum

15,000 to 17,000 Mc/s

VSWR 1.4 maximum

15,060 to 16,940 Mc/s

Ignitor Ignition Time (max.)

5 sec.

Ignitor Voltage Drop at  $I_i=100\mu\text{A}$ dc

350-500 volts

Spike Leakage Energy (max.)

0.30 ergs

$F=16000\text{Mc}$ ;  $P_o=80\text{kw}$ ;

$t_{p1}=0.5\mu\text{s}$ ;  $t_{p2}=0.25\mu\text{s}$

$\text{prf}=3000\text{pps}$ ;  $I_i=100\mu\text{A}$ dc

Flat Leakage Power (max.)

(See Spike Leakage for test conditions)

Insertion Loss (max.) at  $F=16,000\text{Mc}$  and  $I_i=0$

0.7 db

Ignitor Interaction (max.) at  $F=16,000\text{Mc}$  and  $I_i=100\mu\text{A}$ dc

0.2 db

Recovery Time (max.) at 80 kw peak 3 db down

10  $\mu\text{s}$

High Level VSWR (max.)

1.2

$F=16,000\text{Mc}$ ;  $P_o=40\text{kw}$ ;

$t_p=0.5\mu\text{s}$ ;  $\text{prf}=3000\text{pps}$ ;

$I_i=100\mu\text{A}$ dc.

### MECHANICAL DATA-GENERAL

Mounting Position

Any

Weight, approximately

3 ounces

### ABSOLUTE MAXIMUM RATINGS

Transmitter Peak Power

100 kw

Transmitter Average Power

67 W

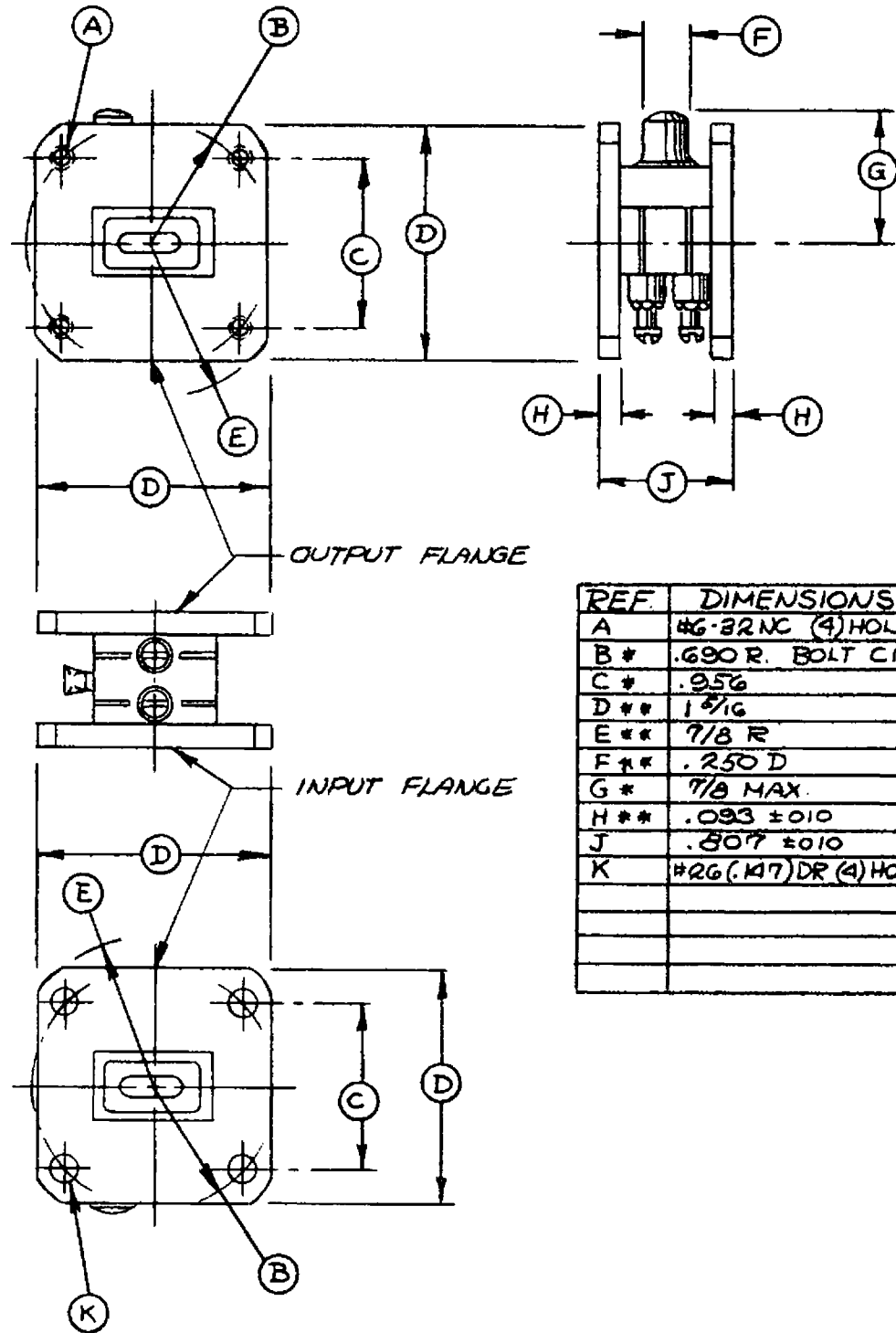
Ignitor Current

200  $\mu\text{A}$ dc

### OUTLINE DRAWING

As per attached drawing dated 5-18-55

from JETEC release #1938, June 3, 1957



NOTE: - EXHAUST STEM  
 NOT TO EXTEND BEYOND FLANGES.  
 ETCH INPUT AND OUTPUT OF TUBE  
 ON TOP CAP SPACER.

	<b>SPECIFICATION SHEET</b>	BOMAC LABORATORIES INC. SALEM ROAD BEVERLY, MASSACHUSETTS
	OUTLINE 6649/BL-56	