

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 μs

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

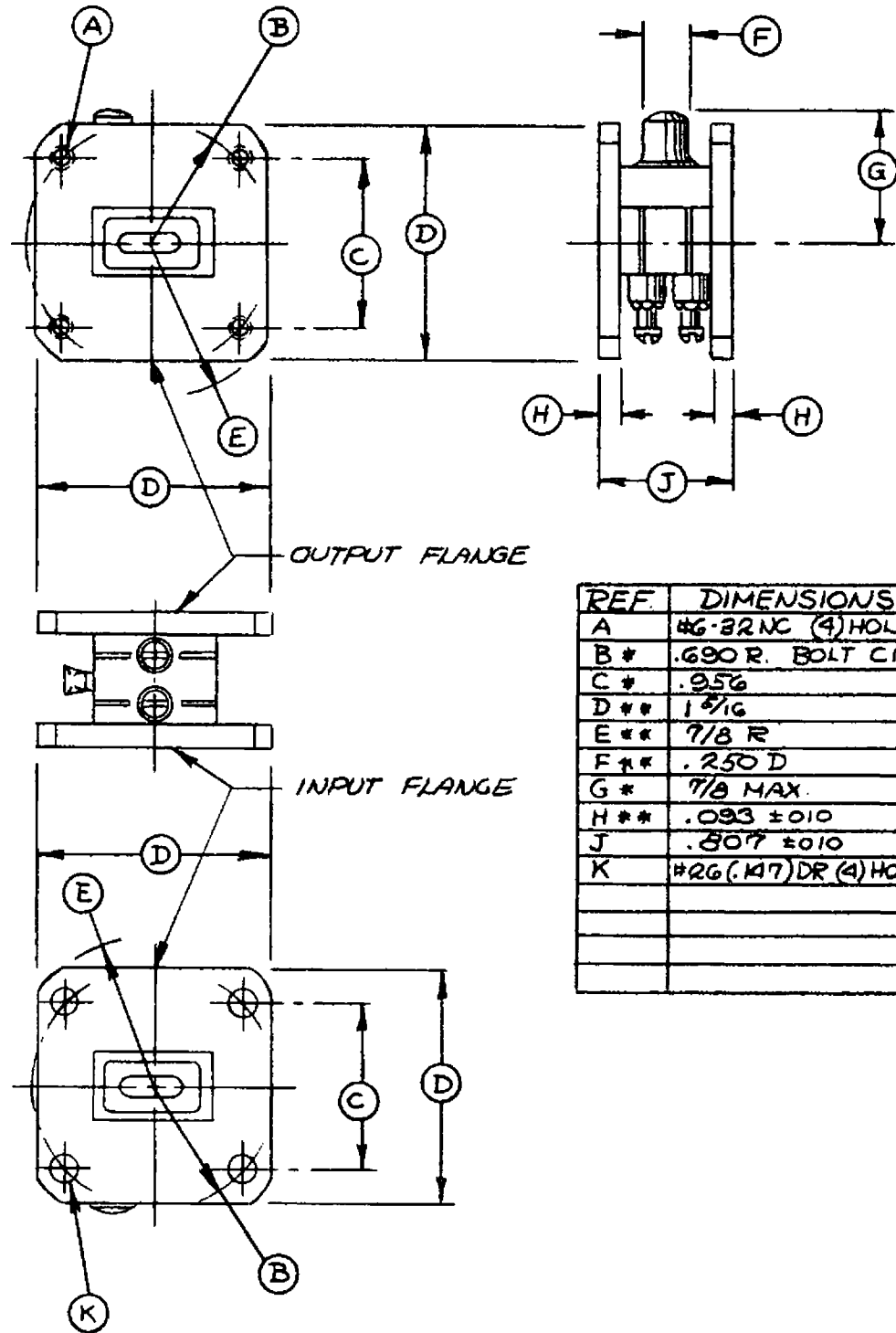
Ignitor Current

200 μA dc

OUTLINE DRAWING

As per attached drawing dated 5-18-55

from JETEC release #1938, June 3, 1957



REF.	DIMENSIONS
A	#6-32 NC (4) HOLES
B*	.690 R. BOLT CIR.
C*	.956
D**	1 5/16
E**	7/8 R
F**	.250 D
G*	7/8 MAX.
H**	.093 ± 010
J	.807 ± 010
K	#26 (.147) DR (4) HOLES

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

SPECIFICATION SHEET		BOMAC LABORATORIES INC. SALEM ROAD BEVERLY, MASSACHUSETTS
OUTLINE		
6649/BL-56		5-18-55