

JETEC TYPE DESIGNATION REGISTRATION FORM

TR TUBE

Manufacturer's Designation: BL-643
JETEC Designation: 6906
Manufacturer: Bomac Laboratories, Inc.
Beverly, Massachusetts

April 24, 1957

GENERAL CHARACTERISTICS

The 6906 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 5395 to 5905 megacycles.

ELECTRICAL DATA-TYPICAL VALUES

Operational Band

VSWR 2.0 maximum

5395 to 5905 Mc/sec

VSWR 1.5 maximum

5450 to 5825 Mc/sec

Ignitor Ignition Time (max.)

5 sec.

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

200-400 Vdc.

Spike Leakage Energy (max.)

0.40 ergs

$F=5650 \text{ Mc}$; $P_o=5 \text{ kw}$; $t_{pl}=1.0 \mu\text{s}$

$t_{p2}=0.5 \mu\text{s}$; $prf=1000 \text{ pps}$; $I_i=100 \mu\text{A}$

Flat Leakage Power (max.)

85 mw

(see Spike Leakage for test conditions)

Insertion Loss (max.) at 5650 Mc and $I_i=0$

0.4 db

Ignitor interaction (max.) at 5650 Mc and

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

0.2 dg

Recovery Time (max.) at 5 kw peak 3 db down

7.0 μs

Phase Shift

$F=5450 \text{ Mc}$

$\pm$: -56

-66 deg.

$F=5650 \text{ Mc}$

$\pm$: -2

-12 deg.

$F=5825 \text{ Mc}$

$\pm$: +34

+44 deg.

MECHANICAL DATA - GENERAL

Mounting Position

Any

Weight, approximately

1.5 lbs

ABSOLUTE MAXIMUM RATINGS

Transmitter Peak Power

5 kw

Transmitter Average Power

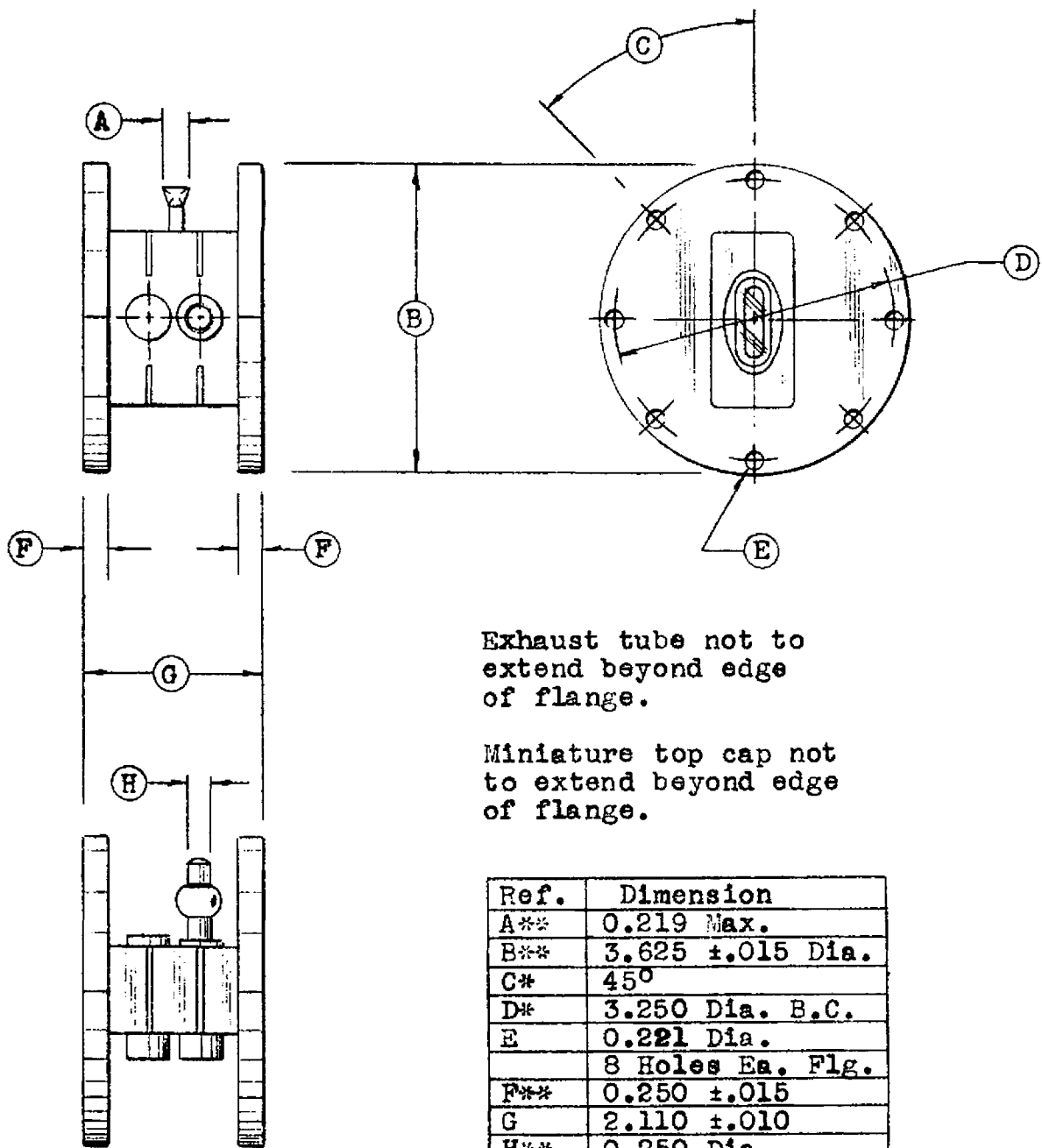
5 W

Ignitor Current

200 μA

OUTLINE DRAWING

As per attached drawing dated 11-2-54



SPECIFICATION SHEET

Outline 6906/BL-643
BL-89, 5865/TR-361

BOMAC LABORATORIES INC.
SALEM ROAD
BEVERLY, MASSACHUSETTS

11-2-54 clr