

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 Mc; $P_o=5 \text{ kw}$; $t_{pl}=1.0 \mu\text{s}$		
tp2=0.5 ns; prr=1000 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 us
Phase Shift		
F=5450 Mc	\pm : -56	-66 deg.
F=5650 Mc	\pm : -2	-12 deg.
F=5825 Mc	\pm : +34	+44 deg.

MECHANICAL DATA - GENERAL

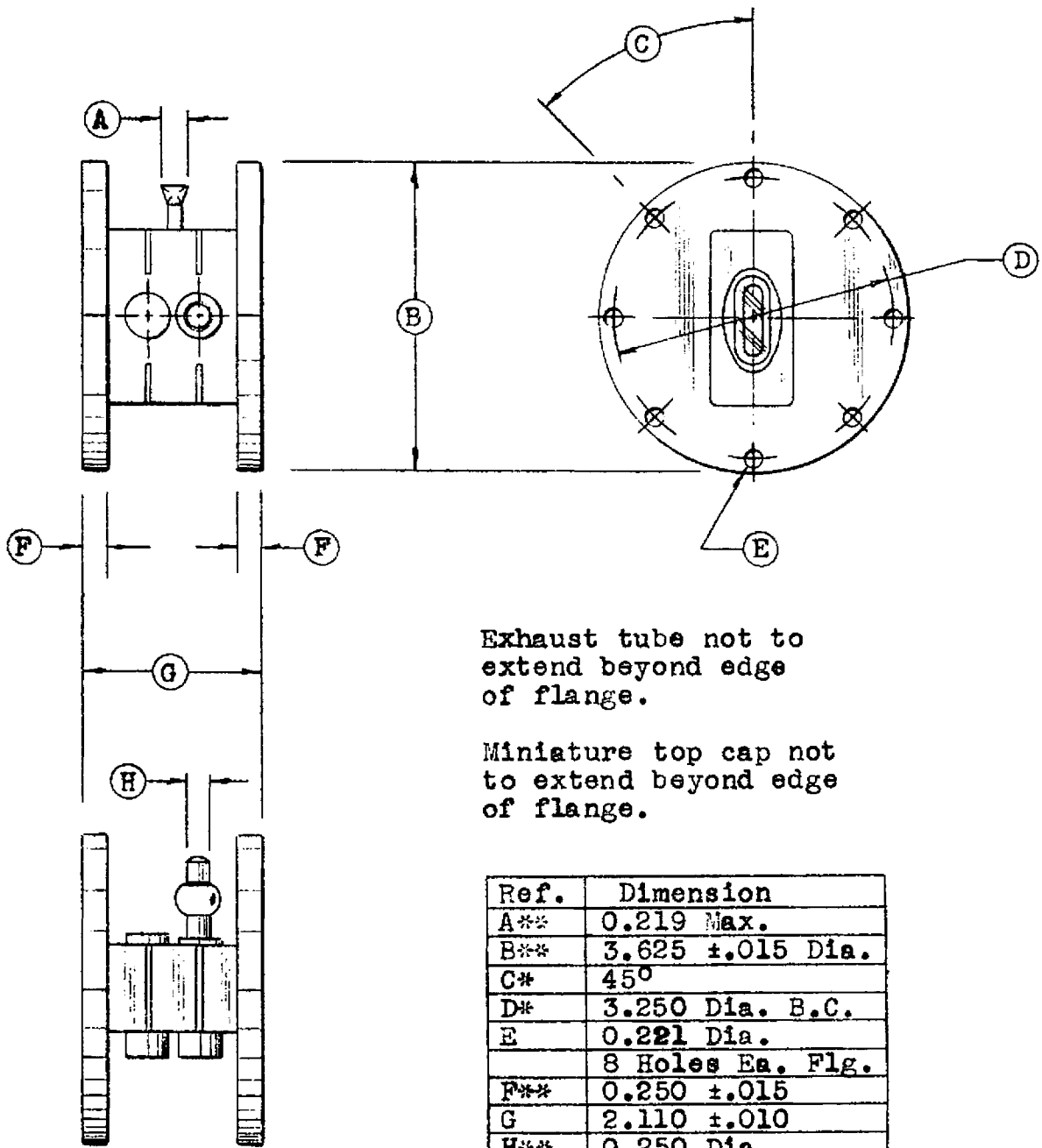
Mounting Position	Any
Weight, approximately	1.5 lbs

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**