TYPE DESIGNATION REGISTRATION FORM

TR TUBE

Manufacturer: Bomac Laboratories, Inc.
Beverly, Massachusetts

Mfr's Tube No. BL-71

Tentative JETEC Type No. 6564

The 6564 (BL-71) is a dual broad-band gas switching tube designed to operate with suitable short-slot hybrid junctions to provide a balanced duplexer using RG51/U waveguide. It is an integral cavity type with an operational band from 8500 to 9600 megacycles per second.

ELECTRICAL DATA - GENERAL

Operational Band 8500 to 9600 Mc.
Voltage Standing Wave Ratio 1.2 max.
Ignitor Starting Voltage -700 Vdc max.
Ignitor Voltage Drop at 100 μA dc of 200 to 375 Vdc.
ignitor current
Spike Leakage Energy 0.1 erg max.
po = 40 kw; prr = 1000 pps;
F = 9000 Mc; tp1 = 1.0 μs
tp2 = 0.5 μs; li = 100 μA dc.
Flat Leakage Power 20 mw max.
See Spike Leakage Energy
Duplexer Loss at li = 100 μA dc
Operating Range 8500 to 9600 Mc. 1.0 db max.
" " 8800 to 9300 Mc. 0.8 db max.
Isolation (Antenna to Transmitter)
Operating Range 8500 to 9600 Mc. 15 db min.
Recovery Time at 200 kw peak; 3 db down 7 μs max.

MECHANICAL DATA - GENERAL

Mounting Position Any
Number of Ignitors Two
Ambient Temperature Range (non-operating) -40 to + 100°C
Net weight, approximately 7 oz.

from JETEC release #1407, Jan. 31, 1955
MAXIMUM RATINGS

Transmitter Peak Power 500 kw
Ignitor Current 200 µA dc

OUTLINE DRAWING

Tube outline as per attached drawing dated 9/7/54.
Mating flange as per attached drawing dated 12/13/54.
NOTE: EXHAUST STEM NOT TO EXTEND BEYOND FLANGES
**SPECIFICATION SHEET**

**MATING FLANGE**

6564/BL-71

**REF** | **DIMENSION**  
---|---  
A | .722 ± .004  
B | 1.20 X 45° CHAMFER OR 1/8 R  
C | 3.210  
D | 2.892 ± .008  
E | 1.448 ± .008  
F | .005 R, MAX  
G | .628 ± .387  
H | .672 ± .004  
J | 1.080 ± .004  
K | 1.380  
L | .089 ± .002  
M | .250  
N | 2.440 ± .002  
P | 2.684 ± .004  
Q | .046 ± .002  
R | 1/16 (1/32) DR. (10) HOLES