JETEC TYPE DESIGNATION REGISTRATION FORM

DUAL TR TUBE

Manufacturer's Designation: BL-616 April 13, 1957

JETEC Designation: 6685

Manufacturer: Bomac Laboratories, Inc.

GENERAL CHARACTERISTICS

The 6685 is a broad-band dual TR tube designed to operate with suitable short-slot hybrid junctions to provide a balanced duplexer using RG 96/U size waveguide. It is an integral cavity type with fixed tuned gaps. Its operational band is from 33,500 to 36,250 megacycles.

ELECTRICAL DATA - TYPICAL VALUES

Operational Band

VSWR 1.3 maximum 33,500 to 36,250 Mc/s

Ignitor Ignition Time (max.) 5.0 max.

Ignitor Voltage Drop at li=100 uAdc 350-475 Volts

Spike Leakage Energy (max.) 0.1 ergs

F=34,500 Mc; po=20 kw; tpl=0.50 us; tp2=0.25 us; prr=1000 pps; Ii=100 uAdc

Flat Leakage Power (max.) 20 mw

(See Spike Leakage for test conditions)

Duplexer Loss (max.) at li=100 uAdc

from 33, 500 to 36, 250 megacycles 1.4 db from 34, 000 to 35, 500 megacycles 1.2 db

Isolation (min.) from 33,500 to 36,250 Mc/s

15 db

Recovery Time (max.) at 20 kw peak

3 db down 5 usec

MECHANICAL DATA - GENERAL

Mounting Position Any
Number of Electrodes One
Weight, approximately 1.5 ozs

ABSOLUTE MAXIMUM RATINGS

Transmitter Peak Power 20 kw
Transmitter Average Power 10 W
Ignitor Current 200 uAdc

OUTLINE DRAWING

As per attached drawing dated 10-28-55

