The Type 1B55 is a broad-band TR switching tube designed to decouple effectively the receiver from a common transmitting and receiving antenna during a transmitting period. It is an integral cavity type with an operational band of 3,360 to 3,740 megacycles.

--- ELECTRICAL DATA ---

Operational Band(1) .... 3360 to 3740 mc  Ignitor Open Circuit Supply
Transmitter Peak Power(min.) .... 10 kw  Voltage(dc) .......... -500 to -700 volts
Ignitor Voltage Drop:(2)  Leakage Power(max.)(3) .......... 40 mw
Minimum ..................... 275 volts  Insertion Loss(max.)(4) .......... 0.7 db
Maximum ..................... 425 volts  Ignitor Interaction(max.)(5) ... 0.3 db
Spike Leak Energy(3) ....... 0.3 erg  Recovery Time(max.)(6) ........ 15 µsec

--- MECHANICAL DATA ---

Mounting Position ............... any  Ambient Temperature Range
Number of Ignitors ............... one (non operating) ...... -40 to +100 °C
Outline ........................ Page 2

--- NOTES ---

(1) With a Voltage Standing Wave Ratio of 1.9 maximum. The Voltage Standing Wave Ratio is 1.4 maximum in the frequency range of 3,390 to 3,710 megacycles.
(2) With ignitor current of 200 microamperes.
(3) With peak power of 50 ±10 kilowatts, pulse repetition rate of 1,000 pulses per second, frequency at 3,550 mc,
(4) At 3,550 megacycles and zero ignitor current.
(5) At 3,550 megacycles and 200 micro-amperes ignitor current.
(6) At 750 kilowatts peak power and 3 db down.

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(See Page 2 for Outline)
OUTLINE

EXHAUST TUBE MUST NOT EXTEND BEYOND FLANGE MORE THAN 1/4.

GASKET

MATERIAL FOR GASKET: 
.115 THICK BRASS BRAID.

ELECTRON TUBE
TYPE 1B55