

The Type 1B55 is a broad-band TR switching tube designed to decouple effectually 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 $\mu$ sec       |

### MECHANICAL DATA

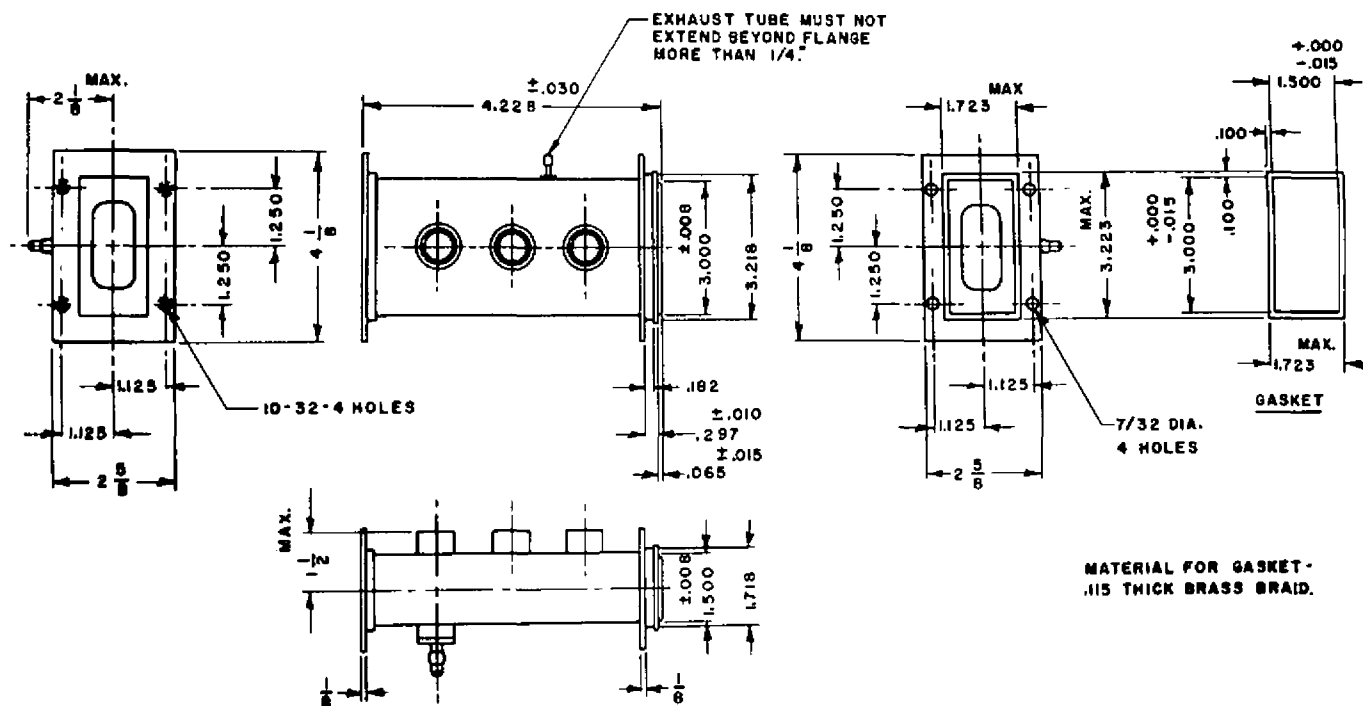
|                          |        |                           |                |
|--------------------------|--------|---------------------------|----------------|
| Mounting Position .....  | any    | Ambient Temperature Range |                |
| Number of Ignitors ..... | one    | (non operating) .....     | -40 to +100 °C |
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### Notes

#### NOTES

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| <p>(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.</p> <p>(2) With ignitor current of 200 microamperes.</p> <p>(3) With peak power of 50 <math>\pm</math>10 kilowatts, pulse repetition rate of 1,000 pulses per second, frequency at 3,550 mc,</p> | <p>(3) (Continued)<br/>pulse duration of 1.0 <math>\pm</math>0.15 and 0.5 <math>\pm</math>0.15 microseconds, and ignitor current of 200 microamperes dc.</p> <p>(4) At 3,550 megacycles and zero ignitor current.</p> <p>(5) At 3,550 megacycles and 200 microamperes ignitor current.</p> <p>(6) At 750 kilowatts peak power and 3 db down.</p> |
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## OUTLINE



**MATERIAL FOR GASKET-  
.115 THICK BRASS BRAID.**

**ELECTRON TUBE  
TYPE 1B55**