

**QF10****T. R. CELL**

A separate cavity T.R. Cell designed for use in 'L' Band.  
It is equivalent to the American Type 1B23.

**PHYSICAL DATA.**

Max. overall length ... 3" (76 mm.).  
Max. dia. over diaphragm flange 1 1/8" (29 mm.).  
For other dimensions see drawing overleaf.

FREQUENCY RANGE ... 400 to 1500 Mc/s.  
Dependent on the  
cavity design.\*

**RATINGS.**

Max. Transmitter Power ... 20 kW.  
Max. Primer Supply Voltage ... -1500 volts.  
Min. Primer Supply Voltage ... -800 volts.  
Max. Primer Current ... 200  $\mu$ A.  
Min. Primer Current ... 100  $\mu$ A.

**CHARACTERISTICS.**

Low Power Level  
†Insertion Loss ... 1.6 dB max.  
Interaction Loss ... 0.2 dB max.

Primer Electrode Characteristic  
Primer Operating Voltage ... 375 to 525 volts.

**OPERATING NOTES.**

- (1) The performance of this T.R. Cell is to a large extent determined by the cavity into which the tube is fitted. It will work satisfactorily over a large portion of the 'L' Band depending on the cavity design.
- (2) The primer electrode should be supplied from a negative potential DC source of at least 800 volts. Suitable resistors should be used to limit the primer electrode current to between 100 and 200 micro-amperes.

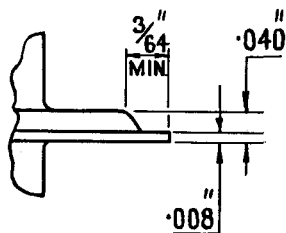
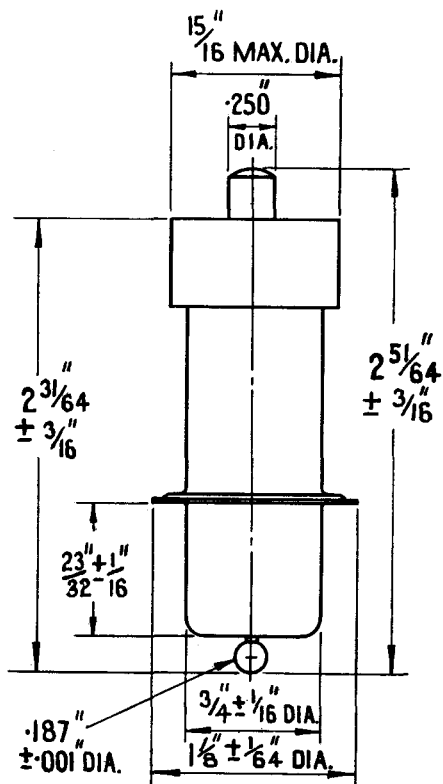
\*When tested in a cavity as drawing 162-JAN the valves will tune in the range 949 to 951 Mc/s.

†In test cavity as drawing 162-JAN.



QF10

Ferranti



ENLARGED VIEW OF  
DIAPHRAGM FLANGE