

FERRANTI

T.R. CELL

QF50

Type QF50 is a tuneable T-R Cell for operation in the Q band.

PHYSICAL DIMENSIONS.

Max. Overall Height ...	...	92 mm. (3.625in.).
Max. Width over Tuner ...	...	31 mm. (1.220in.).
Primer Connection Caps ...	...	Type C.T.I. (0.25in. dia.).

For other dimensions see drawings overleaf.

CHARACTERISTICS.

Low Level Characteristics.

Loaded 'Q' ...	...	150 max.
V.S.W.R. ...	...	2 max.
Tuning Range ...	...	8.4 to 8.8 mm.
Insertion Loss ...	...	2 db. max.

High Power Characteristics.

Nominal Peak Power ...	...	20 kW.
Nominal Mean Power ...	...	8 watts.
Leakage { Spike ...	...	0.045 e/p. max.
{ Flat ...	...	25 mW. max.
Recovery Time to 3 db. ...	...	2 μ secs. max*
Recovery Time to 1 db. ...	...	4 μ secs. max.

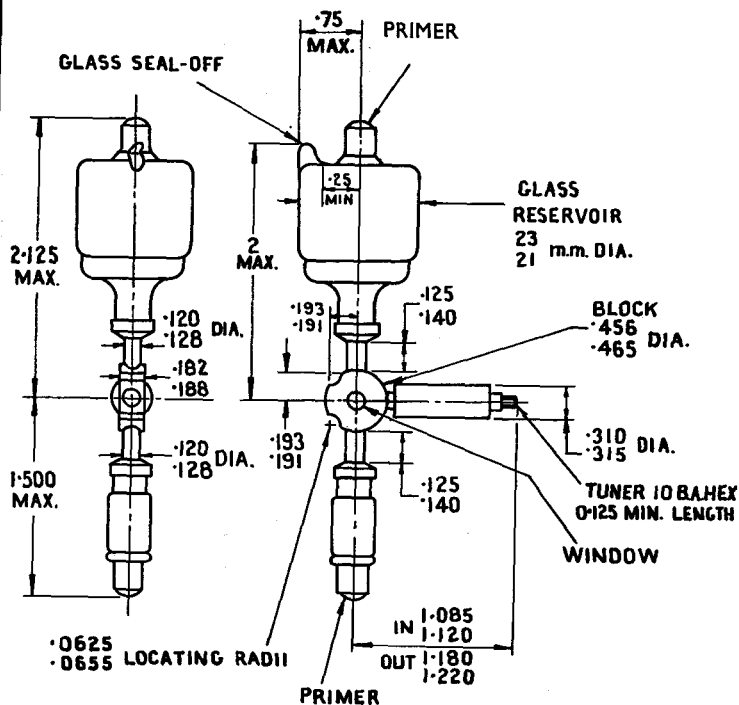
Primer Characteristics.

Primer Supply Voltage ...	...	-2 kV.
*Primer Current		50 to 75 μ amps.

*The primer electrodes should be fed from a source maintained at a negative potential of 2,000 volts DC. The primer current should be restricted to a value between 50 and 75 μ A. by employing suitable limiting resistors. Some of this resistance may be located in the power supply but at least 2 megohms must be connected directly on to each primer terminal to prevent relaxation oscillations.



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Note:

Maximum displacement of tuning mechanism is 2° with cell held against either face and held on locating radii.