

**T. R. CELL**

A broad band passive protection cell normally used in conjunction with pulsed attenuators or in radar systems where protection against random signals is not available.

The cell should be mounted in the receiver arm, between rectangular flanges for W.G.16.

**PHYSICAL DATA.**

Dimensions	...	...	See outline drawing overleaf.
Waveguide	...	...	W.G.16 (0.4" x 0.9").
Primer Terminal	...	...	CT.1.
Mounting Position	...	...	Any.

**FREQUENCY RANGE** ... 8950 to 9600 Mc/s.

**RATINGS.**

Max. Line Power level	...	...	10 kW.
*Max. Primer Supply Voltage	...	...	-1500 volts.
Min. Primer Supply Voltage	...	...	-950 volts.
*Max. Primer Current	...	...	150 $\mu$ A.
*Min. Primer Current	...	...	100 $\mu$ A.
Ambient Temperature Range (non-operating)	...	...	-40 to +100 °C.

**CHARACTERISTICS.**

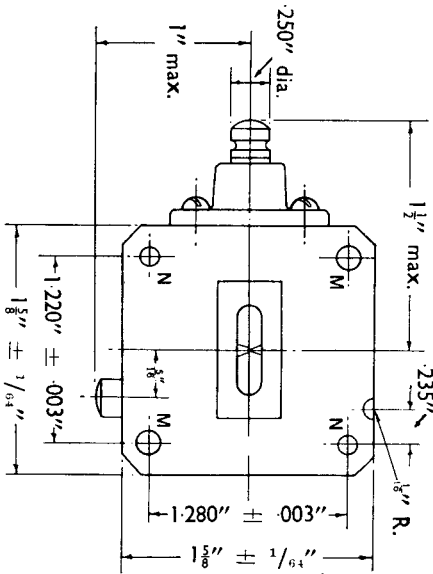
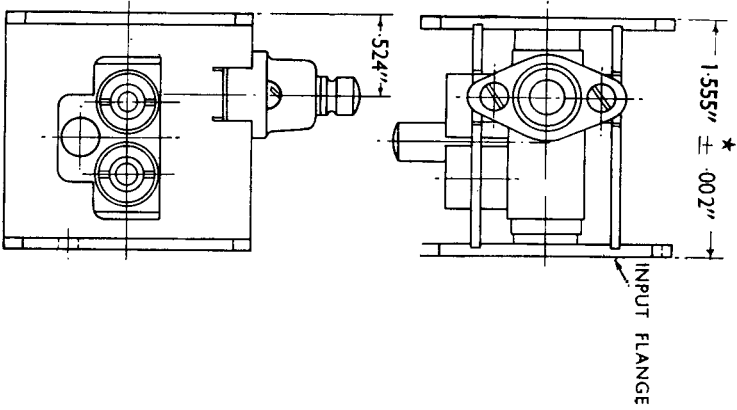
Low Power Level.	Average. Limit.		
Insertion Loss :-			
8950 to 9600 Mc/s.	...	0.6	1.0 dB.
V.S.W.R.	...	1.15	1.25 dB.
High Power Level.			
Breakdown Power	...	120	200 mW.
Leakage at 40kW. peak :-			
Total Leakage Power	...	12	20 mW.
Spike Leakage Energy	...	0.12	0.2 ergs/pulse.
†Recovery Time (to 6dB. loss)	...	—	50 $\mu$ Sec.
Primer Characteristics.			
Primer Operating Voltage	...	200	180 to 280 } volts.

\*A suitable resistor should be connected in series with the electrode to limit the current to between 100 and 150 micro-amperes. At least 1 megohm should be connected directly to the primer electrode terminal.

†Measured at 10 kW.

**NF40**

\* Flanges are flat and parallel within these limits



**M**—2 holes in each flange:—.170" dia.  $\pm .002''$  coaxial to each other  
**N**—2 holes in each flange:—.150" dia.  $\pm .002''$  coaxial to each other  
 The holes are positioned as shown and are on a 1.768"  $\pm .004''$  P.C.D.