



NF41

T. R. CELL

A very broad band power limiting cell for use in Radar systems as a unit to provide protection for crystals against random signals.

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 ... 7000 to 11500 Mc/s.

RATINGS.

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

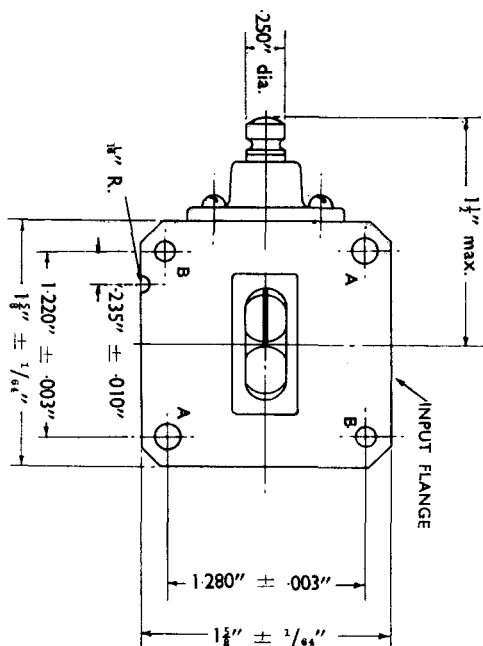
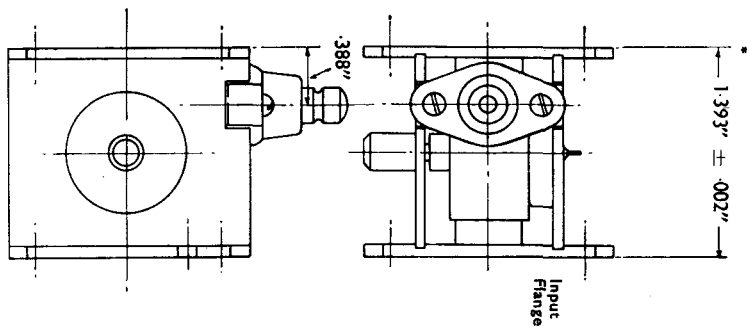
CHARACTERISTICS.

Low Power Level.		Average. Limit.	
Insertion Loss :—			
7400— 7900 Mc/s.	...	0.6	1.2 dB.
8000— 9900 Mc/s.	...	0.4	0.9 dB.
10000—10600 Mc/s.	...	0.3	0.8 dB.
7000—11500 Mc/s.	...	—	4 dB.
High Power Level.			
Breakdown Power		150	300 mW.
Leakage at 40kW. peak :—			
Total Leakage Power	...	60	— mW.
Spike Leakage Energy	...	0.13	— ergs/pulse.
†Recovery Time (to 6dB. loss)	...	—	50 μSec.
Primer Characteristics.			
Primer Operating Voltage	...	190	170 to 240 } 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 watts.

*Flanges are flat and parallel within these limits



A—2 holes in each flange: .170" dia. ± .003" coaxial to each other
 B—2 holes in each flange: .150" dia. ± .003" coaxial to each other
 The holes are positioned as shown and are on a 1.768" ± .003" P.C.D.

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