



RADIATION COUNTER TUBE

DESCRIPTION

The type 1B90 is an all glass, thin-wall, self-quenching counter tube for detecting beta and gamma radiation. It is designed for use in battery operated survey instruments and Prospector's Units for locating radioactive material.

MECHANICAL DATA

ENVELOPE: T6 Glass. Thin-wall, nominal*: 35 mg. per sq.cm.

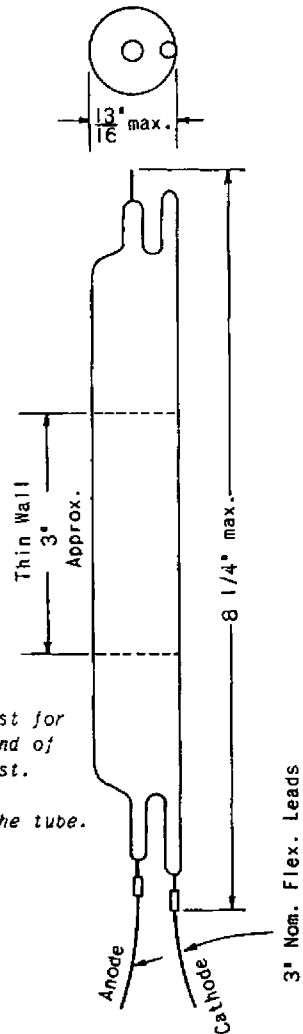
BASE: Untinned flexible stranded leads. Length: 3", nominal

MOUNTING POSITION: Any

ELECTRICAL DATA

RATINGS:

Testing Voltage, max.**	Threshold † 150 volts,dc
Counting Rate, max.	12000 CPM
Temperature Range	-40° to +55° Cent.
Geiger Threshold, max.	1100 volts,dc
Plateau Length **	150 volts,dc
Relative Plateau Slope	3% per 100 volts
Operating Voltage **	Threshold † 50 volts,dc
Background † (approx.)	60 CPM
Efficiency, min.	90%
Capacity, average ††	1.2 μfids.
Life	10 ⁸ Counts



- * Use caution when handling thin wall of bulb.
- ** The plateau length for new tubes is longer than indicated, however, do not test for maximum length as tubes are readily damaged by very short discharges at the end of the plateau. The maximum rating test voltage should not be exceeded during test. Operating voltage shown is for fixed voltage operation. Application of reverse battery polarity will destroy the characteristics of the tube.
- † The tube is covered with an opaque coating to exclude light.
- †† Does not include leads.