VOLTAGE REFERENCE TUBE

85A1

Neon-filled two-electrode tube having a high order of stability over both long and short periods and very small variations from tube to tube.

This data should be read in conjunction with the GENERAL OPERATIONAL RECOMMENDATIONS—VOLTAGE STABILISER AND REFERENCE LEVEL TUBES which precede this section of the handbook.

MAINTENANCE TYPE

LIMITING VALUES (absolute ratings)

Minimum voltage necessary for ignition	125	V
Burning current		
Maximum	8.0	mA
Minimum	1.0	mA
Maximum negative anode voltage	75	V

PREFERRED OPERATING CONDITION

Burning current	4.5±0.2	mA

CHARACTERISTICS

Measured at preferred operating condition

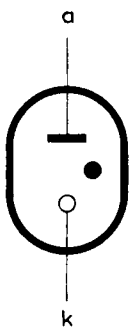
Maintaining voltage (variation from tube to tube)	83 to 86	V
Incremental resistance		
Average	290	Ω
Maximum	450	Ω
Maximum percentage variation of maintaining voltage for current change of 4.3 to 4.7mA	0.17	%
*Maximum percentage variation of maintaining voltage during life	0.5	%
Maximum percentage variation of maintaining voltage after the first 300 hours of life	0.2	%
Maximum short term (≦100 hours) variation of maintaining voltage after the first 300 hours of life	0.1	%

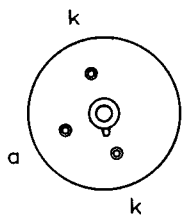
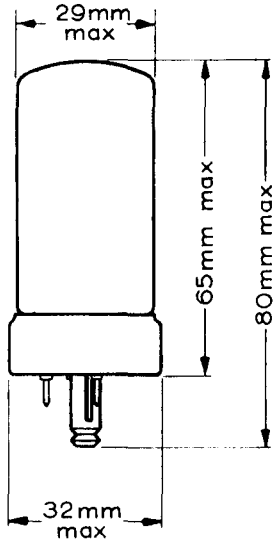
*After initial warming-up period of 3 minutes.

NOTES

1. Equilibrium conditions are normally reached after 3 minutes' operation.
2. Over life, the incremental resistance will remain sensibly constant but the temperature coefficient of the maintaining voltage can be expected to decrease slightly.
3. The noise generated by the tube over a frequency band of 30 to 10,000c/s, is of the order of 70μV, which is equivalent to the noise generated by a resistance of approximately 30MΩ. The noise is evenly distributed over the frequency range.
4. This tube should not be subjected to shock or continuous vibration.

6130





B8G Base