



QS1212

VOLTAGE REFERENCE TUBE

Service Types CV4048, CV5285

The data to be read in conjunction with the Voltage Stabilizer Preamble.

DESCRIPTION

The QS1212 is a single gap cold cathode gas-filled voltage reference tube with a B7G base. It is rugged and reliable and is designed to provide a very stable voltage output of 85 volts over long periods. Radioactive material is used to give the same maximum striking voltage in total darkness and normal lighting.

GENERAL DATA

Characteristics

Striking voltage in normal lighting or total darkness	115	V max
Operating voltage at 6.0mA	85 ± 2	V
Cathode current range	1.0 to 10	mA
Regulation:		
over current range of 1.0 to 10mA	4.0	V max
over current range of 5.8 to 6.2mA	0.18	V max
Variation of operating voltage with life (see note):		
during the first 300 hours	0.3	% max
during subsequent 1000 hours	0.2	% max
during any 1000 hour period after the first 1000 hours	0.1	% max
Acceleration (continuous)	2.5	g max
Shock (short duration)	500	g max
Noise (peak to peak) (50 to 5000Hz) over the current range 1.0 to 10mA	5.0	mV max
Voltage jumps over the current range 1.0 to 10mA	100	mV max

Continued on page 2

Characteristics (Continued)

Ambient temperature range	-55 to +90	°C
Temperature coefficient:		
between -55°C and +25°C	-10	mV/°C max
between \mp 25°C and +90°C	-5.0	mV/°C max

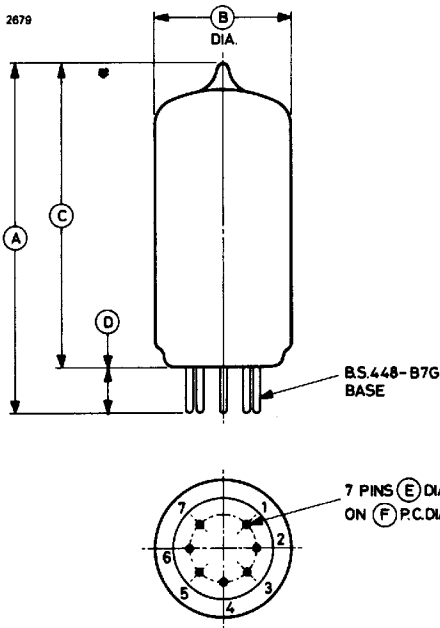
Mechanical

Overall length	2.126 inches (54.0mm) max
Seated height	1.874 inches (47.6mm) max
Overall diameter	0.748 inch (19.0mm) max
Mounting position	any
Base	B.S.448-B7G

Note For minimum variation of operating voltage with life the current should be as nearly constant as possible, preferably 6.0mA.



OUTLINE (All dimensions without limits are nominal)



Ref	Inches	Millimetres
A	2.126 max	54.0 max
B	0.748 max	19.0 max
C	1.874 max	47.6 max
D	0.281 max	7.14 max
E	0.040	1.02
F	0.375	9.53

Millimetre dimensions have been derived from inches.

Pin	Element
1	Anode
2	Cathode
3	Internal connection
4	Cathode
5	Anode
6	Internal connection
7	Cathode