AH2511

MERCURY VAPOUR RECTIFIER

JEDEC Type 6693

ABRIDGED DATA

Hot cathode mercury vapour rectifier		
Peak inverse anode voltage	15	kV max
Peak anode current (at 15kV p.i.v.)	12	A max
Mean anode current (at 15kV p.i.v.)	3.0	A max
Fault anode current (0.1s max)	120	A max
Frequency	150	Hz max

GENERAL

Electrical

Filament		oxide coated
Filament voltage	5.0	V
Filament current	11.5	A
Filament heating time (minimum)	1.0	min
Voltage drop (approx)	12	V
Condensed mercury temperature rise above ambient (approx):		
at no load	13	°C
at 2.5A load	23	°C

Mechanical

Overall length	308mm (12.126 inches) max
Overall diameter	72mm (2.835 inches) max
Net weight	450g (1 pound) approx
Mounting position	vertical, base down
Base	B4D with bayonet
Top cap	B.S.448/CT9 fitted with screw terminal adaptor

March 1969

MAXIMUM OPERATING CONDITIONS (Absolute values)

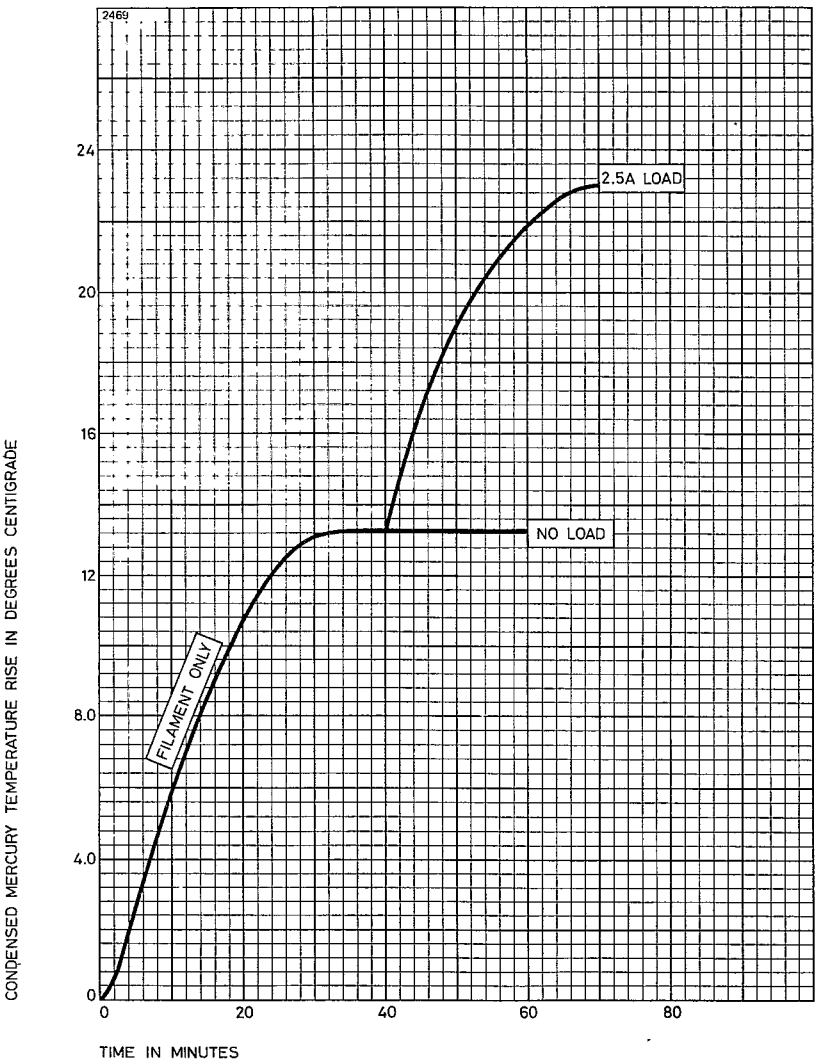
Circuit*	Condensed mercury temp. (°C)	Peak inverse voltage (50—60Hz) (kV)	Anode current in amperes peak	mean♦	Transformer secondary voltage (r.m.s.) (kV)	Maximum d.c. output (kV)	(A)
A	25—55	15	12	3.0	5.3	4.8	6.0
Single phase	25—60	10	12	3.0	3.5	3.2	6.0
full wave	25—75	2.5	20	5.0	0.88	0.8	10
B	25—55	15	12	3.0	10.6	9.6	6.0
Single phase	25—60	10	12	3.0	7.1	6.4	6.0
bridge	25—75	2.5	20	5.0	1.77	1.6	10
C	25—55	15	12	3.0	6.1†	7.2†	9.0
Three phase	25—60	10	12	3.0	4.1†	4.8†	9.0
half wave	25—75	2.5	20	5.0	1.02†	1.2†	15
D	25—55	15	12	3.0	6.1	14.3	9.0
Three phase	25—60	10	12	3.0	4.1	9.5	9.0
full wave	25—75	2.5	20	5.0	1.02	2.4	15

* See Typical Rectifier Circuits for Choke input filters in the preamble to the Rectifier section of the Valve Data Book.

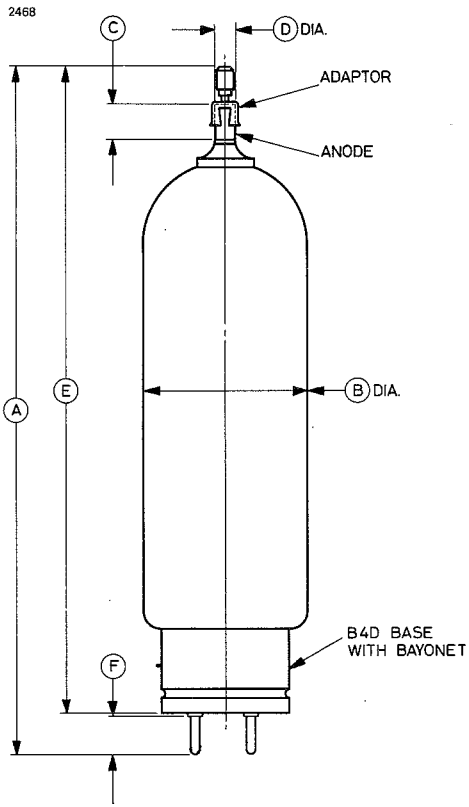
† For operation at constant full load. If the load is reduced, the peak inverse voltage on the valves will exceed the ratings unless the transformer secondary voltage is reduced. The total reduction required is 14% at no load and the d.c. output voltage will be correspondingly reduced.

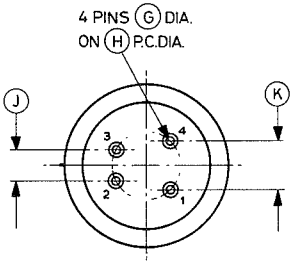
♦ Averaging time 15 seconds maximum.

HEATING CHARACTERISTIC



OUTLINE





VIEW ON BASE

Pin	Element
1	No connection
2	Filament
3	Filament
4	No connection

Ref	Inches	Millimetres	Ref	Inches	Millimetres
A*	11.811 ± 0.315	300.0 ± 8.0	F	0.625	15.88
B*	2.835 max	72.0 max	G	0.187 ± 0.003	4.750 ± 0.076
C	0.593	15.06	H	1.000	25.40
D	0.375 ± 0.002	9.525 ± 0.051	J	0.562	14.27
E*	11.122 ± 0.236	282.5 ± 6.0	K	0.750	19.05

Millimetre dimensions have been derived from inches except where marked *.