



Half-Wave Gas-Filled Rectifier

Code: 4B32 (CV2518) ←

The 4B32 is a xenon-filled, half-wave rectifier designed for operation in high voltage circuits where extremes of ambient temperature are encountered.

It is well suited for mobile applications since its construction permits the valve to be mounted in any position and heaters, fans and thermostats are not required for the close control of bulb temperature.

CATHODE

Oxide-coated filament		
Filament voltage	5.0	V
Nominal current	7.5	A
Minimum heating time	30	sec

DIMENSIONS

Maximum overall length	216	mm
Maximum diameter	59	mm
Base	B4F	
Top cap	CT3 with insulating collar	
Mounting position	Unrestricted	←

MAXIMUM RATINGS

Maximum peak inverse voltage	10	kV
Maximum peak anode current	5.0	A
Maximum average anode current	1.25	A
Maximum fault anode current	50	A←
Maximum duration of fault anode current	0.1	sec←
Maximum voltage drop	16	V←
Maximum frequency for above ratings	150	c/s
Ambient temperature range	-55 to +70	°C

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TYPICAL OPERATING CONDITIONS.

Circuit	No. of Valves	Maximum A.C. Input Voltage (V_{rms})	Maximum D.C. Output Voltage (V)	Maximum D.C. Output Current (A)
Single Phase Full Wave Circuit No. 1	2	3535	3180	2.5
Single Phase Full Wave Bridge Circuit No. 2	4	7070	6360	2.5
Three Phase Half Wave Circuit No. 3	3	4080	4780	3.75
Three Phase Double Y Parallel Circuit No. 4	6	4080	4780	7.5
Three Phase Full Wave Circuit No. 5	6	4080	9570	3.75

The above tables suitable circuits for this rectifier, and shows their safe maximum input and output conditions. The values are based on sine wave input and the use of a suitable choke input filter.

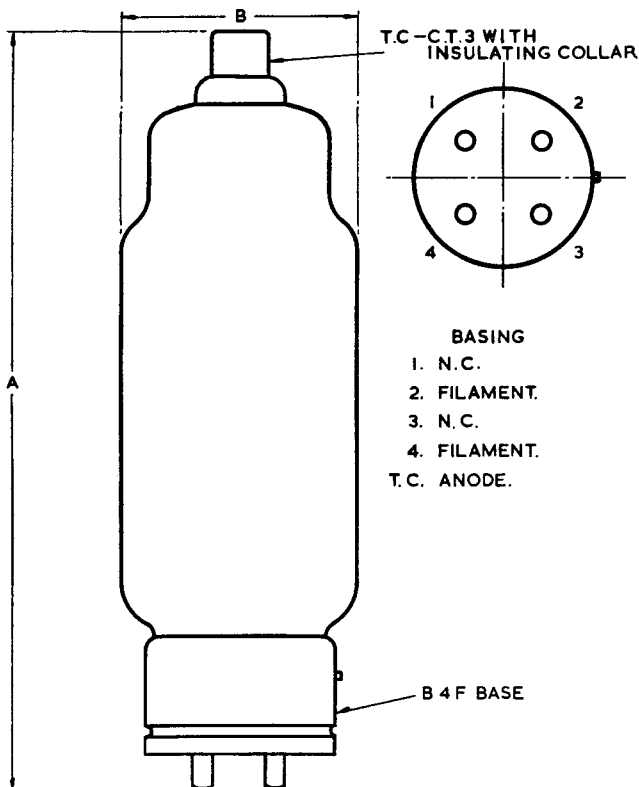
This rectifier being directly heated, it is recommended that the output circuit be taken from the mid-point of the filament supply transformer secondary winding.

For details of the circuits referred to, see sheet K—8 in the introduction to this handbook.



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DIM:	MILLIMETRES	INCHES
A	193·7 MIN:	$7\frac{5}{8}$ MIN:
	215·9 MAX:	$8\frac{1}{2}$ MAX:
B	58·9 MAX:	$2\frac{5}{16}$ MAX:

NOTE:- BASIC FIGURES ARE INCHES.