XENON FILLED RECTIFIER

3B28
(AX224)

Service Type CV1835 **American Designation 3B28**

INTRODUCTION

The 3B28 is a hot cathode, Xenon filled Rectifier with maximum ratings of 1A peak current at 10kV peak inverse voltage and 2A peak current at 5kV peak inverse voltage.

GENERAL DATA
(See also Preamble to Rectifier Section of this Catalogue)

Electrical

Filament	Oxide Coated		
Filament Voltage	2·5		V
Filament Current	5·0		A
Min Filament Heating Time	10		secs
Ambient Temperature Range	−55 to +75		°C
Max Peak Inverse Voltage	5·0	10·0	kV
Max Anode Current:			
Peak	2·0	1·0	A
Mean‡	0·5	0·25	A
Under fault conditions (0·1 second Max duration)	20	20	A
Max Power Supply Frequency	500	150	c/s

Mechanical

Overall Length	6·16 inches	(156 mm)	Max
Overall Diameter	2·07 inches	(53 mm)	Max
Net Weight	2 ounces	(57 gm)	Approx
Mounting Position			Any
Base	Medium UX4 with bayonet		
Cooling			Natural

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MAXIMUM OPERATING CONDITIONS
(Absolute Values—see Preamble)

D.C. Output with choke input filter and delayed H.T. switching

Circuit	* Diagram	Peak Inverse Voltage kV	Anode Current in Amperes		Transformer Secondary Voltage (R.M.S.) kV	Max D.C. Output	
			Peak	Mean‡		kV	Amps
Single Phase Full Wave	A	● 10 △ 5	1 2	0·25 0·5	3·5 1·7	3·1 1·5	0·5 1·0
Single Phase Full Wave Bridge	B	● 10 △ 5	1 2	0·25 0·5	7·0 3·5	6·3 3·1	0·5 1·0
Three Phase Half Wave	C	● 10 △ 5	1 2	0·25 0·5	4·1† 2·0†	4·7† 2·3†	0·75 1·5
Three Phase Full Wave	D	● 10 △ 5	1 2	0·25 0·5	4·1 2·0	9·5 4·7	0·75 1·5

*For diagrams see Typical Rectifier Circuits for Choke Input Filters in the preamble to this section of the catalogue.

†For operation with constant full load. If the load resistance is increased the secondary voltage should be decreased (to avoid excessive peak inverse voltage) until at no load the reduction is 14%. The D.C. output voltage will be correspondingly decreased.

‡Mean anode currents are averaged over any period of 15 seconds maximum.

●For operation up to 150c/s.

△For operation up to 500c/s.

OUTLINE

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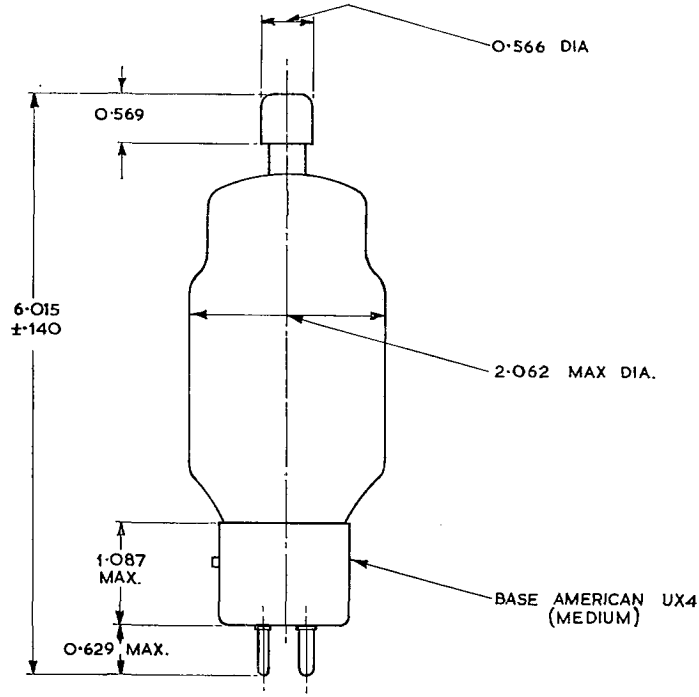

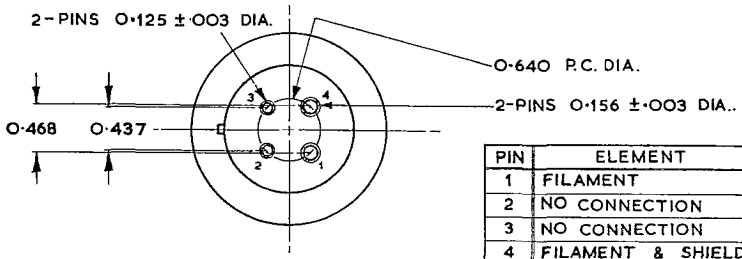

PIN	ELEMENT
1	FILAMENT
2	NO CONNECTION
3	NO CONNECTION
4	FILAMENT & SHIELD
CAP	ANODE

ALL DIMENSIONS IN INCHES