



ELECTRONIC TUBE REFERENCE

4B32

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

RECTIFIER

Directly heated xenon-filled half-wave rectifier for high-voltage supplies over a wide temperature range. Rated for approximately 10 kV peak inverse voltage, 1.25 A DC output, and 5 A peak current.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	4 V / 5 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
MAXIMUM CATHODE CURRENT	1.25 A
PEAK INVERSE VOLTAGE	10000 V
NOMINAL OUTPUT CURRENT	1.25 A
PEAK FORWARD CURRENT	5 A
FORWARD VOLTAGE DROP	16 V
WARM-UP TIME	5 s
<i>Published ratings and characteristics promoted where applicable.</i>	

Xenon-filled half-wave rectifier with high peak-current capability and a wide temperature range.

SOURCE OPERATING CONDITIONS

1946 Standard Telephone and Cables

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1946 STANDARD TELEPHONE AND CABLES

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Supply frequency	50 Hz	ChokeInputFilter
Minimum cathode heating time	30 s	—
Maximum fault anode current	50 A	—
Maximum fault-current duration	0.1 s	—

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1958 Amperex Industrial

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1958 AMPEREX INDUSTRIAL

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament heating time	30 s	—
Tube voltage drop	10 V	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse anode voltage	10000 V	—
Peak anode current	5 A	—
Average anode current	1.25 A	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Surge current	50 A	—


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Tung Sol

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1961 TUNG SOL

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Warmup Time	5 s	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MaximumSurgeCathodeCurrent	50 A	—


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1963 Amperex Condensed

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1963 AMPEREX CONDENSED

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament heating time	30 s	HalfWave;Xenon
Tube voltage drop	10 V	HalfWave;Xenon

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse anode voltage maximum	10000 V	HalfWave;Xenon
Peak anode current maximum	5 A	HalfWave;Xenon
Average anode current maximum	1.25 A	HalfWave;Xenon
Surge current maximum	50 A	HalfWave;Xenon



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 English Electric Valve

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1971 ENGLISH ELECTRIC VALVE

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament voltage	5 V	—
Filament current	7.1 A	—
Minimum filament heating time	30 s	—
Fault current	50 A	0.1 s maximum
Maximum power-supply frequency	150 Hz	—

TUBE TINKER

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