



ELECTRONIC TUBE REFERENCE

ESU103

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
RECTIFIER

Directly heated xenon half-wave rectifier for high-voltage supplies. Gas-assisted conduction provides substantial current at multi-kilovolt voltage with low forward drop.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	2.5 V / 5 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Rectifier	
PEAK INVERSE VOLTAGE	10000 V
NOMINAL OUTPUT CURRENT	250 mA
PEAK FORWARD CURRENT	1 A
FORWARD VOLTAGE DROP	12 V
WARM-UP TIME	10 s

Directly heated half-wave xenon rectifier.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1960 Mazda

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

1960 MAZDA

Section 1 · Rectifier

CONSTRUCTION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filling	Xenon	—

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heating delay time	10 s	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Full-wave output voltage at 0.5 A	3200 V	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 AEI Industrial Valves

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

1961 AEI INDUSTRIAL VALVES

Section 1 · Rectifier

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PeakInverseVoltageAtHighCurrent	5 kV	PeakForwardCurrent=2A
PeakInverseVoltageAtLowCurrent	10 kV	PeakForwardCurrent=1A
AmbientTemperatureRange	-55–75 C	—

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Associated Electrical Industries

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

1961 ASSOCIATED ELECTRICAL INDUSTRIES

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Alternate peak inverse voltage	5 kV	1AOutput
Alternate mean anode current	500 mA	5kVPIV

TUBE TINKER

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