



ELECTRONIC TUBE REFERENCE

RY12100

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

RECTIFIER

Directly heated vacuum half-wave rectifier for high-voltage rectifier and surge-limiting circuits, providing approximately 40 kV inverse-voltage capability.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	5 V / 6 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
MAXIMUM PLATE DISSIPATION	60 W
MAXIMUM CATHODE CURRENT	100 mA
PEAK INVERSE VOLTAGE	40000 V
NOMINAL OUTPUT CURRENT	100 mA
PEAK FORWARD CURRENT	750 mA
FORWARD VOLTAGE DROP	200 V
WARM-UP TIME	5 s
Gas filling: Vacuum. Rectifier service maximum anode dissipation is 60 W; limiter service permits 12.5 kV forward anode voltage and 75 W anode dissipation. Filament may be raised to 5.8 V in limiter service.	

Vacuum half-wave rectifier for high-voltage rectifier and surge-limiting circuits, rated 40 kV peak inverse and 100 mA average current. Rectifier service maximum anode dissipation is 60 W; limiter service permits 12.5 kV forward anode voltage and 75 W anode dissipation. Filament may be raised to 5.8 V in limiter service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1962 Mullard Industrial Rectifiers

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

1962 MULLARD INDUSTRIAL RECTIFIERS

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filling	Vacuum	—
Filament Voltage Tolerance	5 percent	RectifierService
Filament Current Tolerance	500 mA	At5V

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Voltage	5.8 V	SurgeLimitingService
Maximum Anode Seal Temperature	225 C	RectifierService
Maximum Forward Anode Voltage	12500 V	LimiterService
Maximum Anode Dissipation	75 W	LimiterService
Applied AC Voltage per Valve RMS	14000 V	SinglePhaseFullWave;CapacitorInputFilter
DC Output Voltage	17000 V	SinglePhaseFullWave;CapacitorInputFilter
DC Output Current	160 mA	SinglePhaseFullWave;CapacitorInputFilter
DC Output Voltage	12500 V	SinglePhaseFullWave;ChokeInputFilter
DC Output Current	200 mA	SinglePhaseFullWave;ChokeInputFilter

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output Capacitance	1.4 pF	—

An independent reference for electronic tubes, vacuum tubes,
and their source documents.

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