



ELECTRONIC TUBE REFERENCE

RG41250

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
RECTIFIER

Directly heated mercury-vapor half-wave rectifier for substantial power conversion. Its massive filament and low arc voltage provide ampere-class output at high voltage.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	4 V / 11 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Rectifier	
MAXIMUM CATHODE CURRENT	1.25 A
PEAK INVERSE VOLTAGE	20000 V
NOMINAL OUTPUT CURRENT	1.25 A
PEAK FORWARD CURRENT	5 A
FORWARD VOLTAGE DROP	12 V
WARM-UP TIME	60 s
Gas-discharge device.	

Mercury-vapour half-wave rectifier for power rectification, rated up to 20 kV peak inverse and 1.25 A average cathode current. Ratings include 25 A surge current, 150 c/s maximum operating frequency, and mercury-temperature-dependent PIV limits.

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	Mercury vapour	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode Surge Current	25 A	FaultProtection;MaximumDuration0.1s
Maximum Operating Frequency	150 Hz	—
Condensed Mercury Temperature at 20 kV PIV	20–40 C	PIV20000V
Condensed Mercury Temperature at 10 kV PIV	20–55 C	PIV10000V
Filament Voltage Maximum	4.1 V	—
Filament Voltage Minimum	3.9 V	—
DC Output Voltage	6300 V	SinglePhaseFullWave;TwoValves
DC Output Current	2.5 A	SinglePhaseFullWave;TwoValves

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 Mullard Gas Filled Tubes

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

1971 MULLARD GAS FILLED TUBES

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum peak inverse anode voltage	20 kV	—
Maximum average cathode current	2 A	—
Maximum surge cathode current	1.25 A	Fault protection
Heater/filament voltage	4 V	—
Heater/filament current	11 A	—