



ELECTRONIC TUBE REFERENCE

1138

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
RECTIFIER

Directly heated Philips mercury-vapour or gas-filled industrial rectifier for battery charging and cinema rectifier equipment. Rated for approximately 275 V peak inverse voltage and 15 A nominal output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	GOLIATH	BASE PINS	—
NOMINAL HEATER	2.5 V / 27 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
PEAK INVERSE VOLTAGE	275 V
NOMINAL OUTPUT CURRENT	15 A
PEAK FORWARD CURRENT	85 A
FORWARD VOLTAGE DROP	10 V
WARM-UP TIME	120 s
<i>Directly heated gas-filled rectifier with mercury-vapour/gas filling for battery charging and cinema rectifier service.</i>	

1138 is a directly heated industrial rectifier. Directly heated gas-filled rectifier with mercury-vapour/gas filling for battery charging and cinema rectifier service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Philips Electron Tubes Handbook V3

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V3

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Arc voltage drop	10 V	GasFilled

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum peak inverse anode voltage	275 V	—
Maximum average anode current	15 A	—
Maximum peak anode current	85 A	—
Application	battery charging and cinema rectifier service	—
Heater voltage	2.5 V	DirectAC
Heater current	27 A	DirectAC



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1999 Philips 0-D

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

1999 PHILIPS 0-D

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filling	Mercury vapour and gas	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum RMS input voltage	85 V RMS	—
Minimum RMS input voltage	20 V RMS	—
Peak inverse voltage	275 V	—
Maximum average current	15 A	—
Maximum peak current	85 A	—
Minimum series resistance	0.3 ohm	—
Condensed mercury temperature range	30-80 degC	—

TUBE TINKER

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