



ELECTRONIC TUBE REFERENCE

DCG920

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

RECTIFIER

Philips directly heated single-anode mercury-vapor half-wave rectifier for high-voltage industrial supplies, providing approximately 21 kV inverse-voltage capability and 2.5 A output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	5 V / 13.5 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
PEAK INVERSE VOLTAGE	21000 V
NOMINAL OUTPUT CURRENT	2.5 A
PEAK FORWARD CURRENT	10 A
FORWARD VOLTAGE DROP	12 V
WARM-UP TIME	90 s
Single-anode mercury-vapour rectifier; maximum published inverse-voltage case promoted.	

Single-anode mercury-vapour rectifying valve. The supplied Philips sheet was read for heater/filament data, ratings, characteristics, capacitances, and operating conditions where published.

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

Section 1 · Rectifier

CONSTRUCTION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filling	Mercury vapour	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum peak inverse voltage	21 kV	HighestVoltageCase
Maximum average current	2.5 A	—
Maximum peak current	10 A	—
Maximum surge current	100 A	Duration<=0.1s

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Arc voltage at 2.5 A	12 V	—
Preheating time	90 sec	—