



ELECTRONIC TUBE REFERENCE

DCG57500I

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

RECTIFIER

Directly heated mercury-vapor half-wave industrial rectifier for high-voltage power conversion, using low arc voltage to provide efficient ampere-class DC output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	50 V / 20 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
PEAK INVERSE VOLTAGE	12000 V
NOMINAL OUTPUT CURRENT	1.5 A
PEAK FORWARD CURRENT	7.5 A
FORWARD VOLTAGE DROP	18 V
<i>Mercury-vapour DCG 5/7500-1 data.</i>	

Mercury-vapour rectifier represented by the supplied DCG57500I file; source printing identifies DCG 5/7500-1. 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	12000 V	—
Maximum average rectified current	1.5 A	—
Maximum peak anode current	7.5 A	—
DC output voltage	3800 V	RMSAnodeVoltage=4200V;OutputCurrent=3A
DC output voltage	4900 V	RMSAnodeVoltage=4200V;OutputCurrent=4.5A
DC output voltage	5400 V	RMSAnodeVoltage=4200V;OutputCurrent=6A
DC output voltage	7600 V	RMSAnodeVoltage=8400V;OutputCurrent=3A
DC output voltage	11500 V	RMSAnodeVoltage=8400V;OutputCurrent=4.5A
DC output voltage	10700 V	RMSAnodeVoltage=8400V;OutputCurrent=6A

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Forward voltage drop	18 V	—

TUBE TINKER

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

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

