



ELECTRONIC TUBE REFERENCE

DCG618

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
RECTIFIER

Philips directly heated single-anode mercury-vapor half-wave industrial rectifier for high-voltage conversion, providing approximately 15 kV inverse-voltage capability and 3 A output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	SUPER JUMBO BAYONET	BASE PINS	–
NOMINAL HEATER	5 V / 11.5 A	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Rectifier	
PEAK INVERSE VOLTAGE	15000 V
NOMINAL OUTPUT CURRENT	3 A
PEAK FORWARD CURRENT	12 A
FORWARD VOLTAGE DROP	12 V
WARM-UP TIME	60 s
Single-anode mercury-vapour industrial rectifier.	

DCG618 is a Rectifier device in the supplied Philips industrial literature. Single-anode mercury-vapour industrial rectifier.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Philips Electron Tubes Handbook V4

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V4

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse voltage	15 kV	HighVoltageCondition
Maximum average current	3 A	HighVoltageCondition
Maximum peak current	12 A	HighVoltageCondition
Maximum surge current	120 A	HighVoltageCondition
Peak inverse voltage alternate	2.5 kV	HighCurrentCondition
Maximum average current alternate	5 A	HighCurrentCondition
Maximum peak current alternate	20 A	HighCurrentCondition
Maximum surge current alternate	200 A	HighCurrentCondition

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Arc voltage drop	12 V	—



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 frequency	150 Hz	—
Maximum peak inverse voltage	15 kV	LowFrequencyCase
Maximum average current	5 A	PublishedLimitTable
Maximum peak current	20 A	—
Maximum surge current	200 A	Duration<=0.1s
Condensed mercury temperature range	25-55 degC	15kVCase

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Arc voltage at 3 A	12 V	—