



ELECTRONIC TUBE REFERENCE

DCG7100B

Specialized - Thyatron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
THYRATRON

Mercury-vapor grid-controlled thyatron for industrial controlled rectification and power-control switching.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	5 V / 20 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Thyatron	
PEAK INVERSE VOLTAGE	15000 V
NOMINAL OUTPUT CURRENT	10 A
PEAK FORWARD CURRENT	45 A
FORWARD VOLTAGE DROP	12 V
WARM-UP TIME	600 s
<i>Grid-controlled mercury-vapour rectifying tube for industrial controlled-rectifier service.</i>	

DCG7100B is a Thyatron device in the supplied Philips industrial literature. Grid-controlled mercury-vapour rectifying tube for industrial controlled-rectifier service.

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 · Thyatron

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Arc voltage drop at 15A	12 V	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse anode voltage	15 kV	—
Peak forward anode voltage	15 kV	—
Maximum continuous average anode current	10 A	—
Short-time average anode current	15 A	Tav<=10s
Peak anode current	45 A	—
Surge current	600 A	—
Maximum positive grid voltage	600 V	—
Maximum grid resistance	20 kOhm	—

SOURCE OPERATING CONDITIONS

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 · Thyatron

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filling	Mercury vapour	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Arc voltage at 15 A	12 V	—
Preheating time	10 min	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum peak inverse voltage	15 kV	—
Maximum peak forward voltage	15 kV	—
Maximum average anode current	10 A	—
Maximum intermittent average current	15 A	Tav<=10s
Maximum peak anode current	45 A	—
Maximum surge current	600 A	Duration<=0.1s
Maximum grid pulse voltage	600 V	—
Maximum grid resistance	20 kohm	—

TUBE TINKER

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