



ELECTRONIC TUBE REFERENCE

CAR6

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
RECTIFIER

Water-cooled high-power half-wave rectifier diode for extremely demanding industrial conversion. Its massive filament and roughly 50 kV inverse-voltage capability suit major high-power DC systems.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	20 V / 120 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Rectifier	
MAXIMUM PLATE DISSIPATION	20000 W
PEAK INVERSE VOLTAGE	50000 V

Water-cooled high-power rectifier diode.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1955 Marconi

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

1955 MARCONI

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Voltage	20 V	—
Filament Current	120 A	—
Cooling	Direct water-cooled anode	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Peak Inverse Voltage	50000 V	—
Maximum Anode Dissipation	20000 W	—
Minimum Cooling Water Flow	5 gal/min	—
Maximum Cooling Water Outlet Temperature	65 C	—
Maximum Peak-to-DC Current Ratio	3.5	—
Three-Phase Half-Wave DC Output Current	17 A	—
Double Three-Phase Interconnected DC Output Current	34 A	—