



ELECTRONIC TUBE REFERENCE

XD53

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
RECTIFIER

Directly heated high-current high-vacuum diode for high-voltage rectifier, charging, clipper, and modulator service. Rated for approximately 40 kV peak inverse voltage, 20 A DC output, and 60 A peak current.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	10 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	30000 W
PEAK INVERSE VOLTAGE	40000 V
NOMINAL OUTPUT CURRENT	20 A
PEAK FORWARD CURRENT	60 A
Published ratings and characteristics promoted where directly established; additional values retained as parameters.	

XD53 is a high-vacuum diode for high-voltage rectifier, charging, clipper, and/or modulator service as specified in the datasheet.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X Central Electronics

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

195X CENTRAL ELECTRONICS

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/Filament Voltage	10 V	Published datasheet value
Heater/Filament Current	120 A	Published datasheet value
Interelectrode Capacitance Anode to Filament	35 pF	Published datasheet value



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1960 Central Electronic Tubes

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

1960 CENTRAL ELECTRONIC TUBES

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse voltage	40000 V	—
Peak anode current	60 A	—
Average anode current	20 A	—
Anode dissipation	30000 W	—
Clipper peak anode current	250 A	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament voltage	10 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament current	120 A	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cooling method	Water	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode-filament capacitance	35 pF	—