



ELECTRONIC TUBE REFERENCE

VI14045

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

RECTIFIER

Forced-air-cooled indirectly heated high-voltage pulse rectifier. Its roughly 45 kV reverse-voltage capability and moderate current suit demanding pulse-power applications.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	27 V / —	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
MAXIMUM PLATE DISSIPATION	3000 W
PEAK INVERSE VOLTAGE	45000 V
NOMINAL OUTPUT CURRENT	400 mA
PEAK FORWARD CURRENT	100 A
WARM-UP TIME	180 s
English text used as primary source; Russian text used only to repair/check ambiguous OCR.	

The VI1-40/45 is an indirectly heated high-voltage pulse rectifier tube with forced-air anode cooling.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 Electronintorg

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

1968 ELECTRONINTORG

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/Filament Voltage	27 V	—
Warm-up/Cathode Heating Time	180 s	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Reverse Voltage	45000 V	—
Peak Anode Current	100 A	—
Average/Rectified Anode Current	400 mA	—
Anode Dissipation	3000 W	—
Maximum Forming-Line Voltage	45000 V	—
Peak Anode Current at 3.8 kV Change	40 A	—
Peak Anode Current at 7 kV Change	100 A	—
Anode Current Pulse Duration Maximum	120 us	—