

ELECTRONIC TUBE REFERENCE

1003

Rectifier - Full Wave electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

RECTIFIER-RECTIFIER

Gas-filled full-wave rectifier with an ionically heated cathode for vibrator-type power supplies. It operates without a separate heater supply and provides useful current with low gas-discharge forward voltage.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	— / —	PARALLEL HEATER	— / —
HEATING	Indirect; cold cathode	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Rectifier	
PEAK INVERSE VOLTAGE	880 V
NOMINAL OUTPUT CURRENT	110 mA
PEAK FORWARD CURRENT	330 mA
FORWARD VOLTAGE DROP	24 V
Values promoted from published ratings/characteristics where identifiable.	

SECTION2 Rectifier	
PEAK INVERSE VOLTAGE	880 V
NOMINAL OUTPUT CURRENT	110 mA
PEAK FORWARD CURRENT	330 mA
FORWARD VOLTAGE DROP	24 V
Physical rectifier section 2; electrical properties populated from the same published ratings applicable to the identical rectifier path.	

Gas-filled full-wave rectifier with ionically heated cathode for vibrator-type power supplies.

SOURCE OPERATING CONDITIONS

1938 Raytheon

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

1938 RAYTHEON

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Mox. Peak Inverse Plate Voltage	880 volts	Mox. Peak Inverse Plate Voltage 880 volts
Max. Peak Plate Current	330 ma	Max. Peak Plate Current 330 ma.
(Full-Wave)	300 volts	(Full-Wave) 300 volts
Absolute Min, DC Output Current @	30 ma	Absolute Min, DC Output Current @ 30 ma.
per Plate ϕ	300 ohms	per Plate ϕ 300 ohms

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Plate Voltage, per Plate A	440 volts	Peak Plate Voltage, per Plate A 440 volts
Total Effective Plate Supply Impedance, per Plate ϕ	600 ohms	Total Effective Plate Supply Impedance, per Plate ϕ 600 ohms
Average Dynamic Voltage Drop	24 volts	Average Dynamic Voltage Drop 24 volts
DC Output Voltage	310 volts	DC Output Voltage 310 volts
® Under no circumstances should the tube be operated with less than	30 ma	® Under no circumstances should the tube be operated with less than 30 ma. of cathode current.

1938 RAYTHEON

Section 2 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Mox. Peak Inverse Plate Voltage	880 volts	Mox. Peak Inverse Plate Voltage 880 volts
Max. Peak Plate Current	330 ma	Max. Peak Plate Current 330 ma.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
(Full-Wave)	300 volts	(Full-Wave) 300 volts
Absolute Min, DC Output Current @	30 ma	Absolute Min, DC Output Current @ 30 ma.
per Plate ϕ	300 ohms	per Plate ϕ 300 ohms

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
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Total Effective Plate Supply Impedance, per Plate ϕ	600 ohms	Total Effective Plate Supply Impedance, per Plate ϕ 600 ohms
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