



ELECTRONIC TUBE REFERENCE

F857B

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

RECTIFIER

Directly heated mercury-vapor half-wave rectifier for high-voltage supplies. Its massive filament, low arc voltage, and specified cathode preheating support roughly ten amperes of output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	5 V / 30 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
PEAK INVERSE VOLTAGE	22000 V
NOMINAL OUTPUT CURRENT	10 A
PEAK FORWARD CURRENT	40 A
FORWARD VOLTAGE DROP	15 V
WARM-UP TIME	60 s
Cooling: Convection or Forced Air	

Mercury-vapor half-wave rectifier for high-voltage rectifier circuits, with a 60-second cathode heating requirement and 15 V anode drop.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1962 ITT

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

1962 ITT

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum peak inverse anode voltage	22000 V	—
Peak cathode current	40 A	—
Average cathode current	10 A	—
Cathode heating time	60 s	—
Maximum frequency	150 Hz	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode voltage drop	15 V	—
Critical anode voltage	100 V	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1962 ITT Industrial and Transmitting Tubes

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

1962 ITT INDUSTRIAL AND TRANSMITTING TUBES

Section 1 · Rectifier

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
CriticalAnodeVoltage	100 V	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MaximumSurgeCathodeCurrent	400 A	Maximum0.2Seconds
Maximum Frequency	150 Hz	—

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