

RCA-866 and RCA-866-A

Half-Wave, Mercury-Vapor Rectifiers

RCA-866 and RCA-866-A are half-wave, mercury-vapor rectifier tubes of the coated filament type. They are for use primarily in high-voltage rectifying devices designed to supply d-c power of uniform voltage.

CHARACTERISTICS

	RCA-866	RCA-866-A	
FILAMENT VOLTAGE (a-c)	2.5	2.5	Volts
FILAMENT CURRENT	5	5	Amperes
PEAK INVERSE VOLTAGE:			
Cond. Mercury Temp. of 10° to 60°C* ..	7500 max.	—	Volts
Cond. Mercury Temp. of 25° to 60°C* ..	—	10000 max.	Volts
Cond. Mercury Temp. of 25° to 70°C** ..	—	5000 max.	Volts
PEAK PLATE CURRENT	1.0 max.	1.0 max.	Ampere
AVERAGE PLATE CURRENT	0.25 max.	0.25 max.	Ampere
TUBE VOLTAGE DROP (Approx.)	15	10	Volts

* For supply frequency up to 150 cycles.

** For supply frequency up to 1000 cycles.

INSTALLATION AND APPLICATION

The base pins of the 866 and 866-A fit the standard 4-contact socket, such as the RCA type UR-542A. The socket should be installed to hold the tubes in a vertical position, base down. The plate lead of each tube is brought out through a separate seal at the top of the bulb.

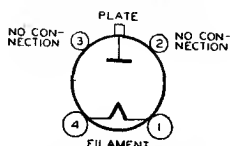
During initial operation, the 866 should be operated for 15 minutes with normal filament voltage and no plate voltage; the 866-A, for 30 minutes with normal filament voltage and no plate voltage. This is done to distribute the mercury properly. The procedure need not be repeated unless, during subsequent handling, the mercury is spattered on the filament and plate.

The filament of the 866 and 866-A should be allowed to come up to operating temperature before the plate voltage is applied. For average conditions the delay should be approximately 30 seconds.

The 866 is capable of delivering a maximum peak plate current of 2.0 amperes provided the peak plate voltage does not exceed 200 volts and the supply frequency does not exceed 150 cycles. Likewise, the 866-A is capable of delivering a maximum peak plate current of 2.0 amperes provided the peak plate voltage does not exceed 200 volts and the supply frequency does not exceed 1,000 cycles.

For additional information, see chapter on RECTIFIERS and FILTERS.

Top View of Socket Connections



RCA-866 and 866-A

