

RCA-872 and RCA-872-A

Half-Wave, Mercury-Vapor Rectifiers

RCA-872 and RCA-872-A are half-wave, mercury-vapor rectifier tubes of the coated filament type. They are intended for use in high-voltage devices designed to supply d-c power of uniform voltage.

CHARACTERISTICS

	RCA-872	RCA-872-A	
FILAMENT VOLTAGE (a-c)	5.0	5.0	Volts
FILAMENT CURRENT	10	6.75*	Amperes
PEAK INVERSE VOLTAGE**:			
Cond. Mercury Temp. of 10° to 60°C.....	7500 max.	—	Volts
Cond. Mercury Temp. of 20° to 60°C.....	—	10000 max.	Volts
Cond. Mercury Temp. of 20° to 70°C.....	—	5000 max.	Volts
PEAK PLATE CURRENT	5 max.	5 max.	Amperes
AVERAGE PLATE CURRENT§	1.25 max.	1.25 max.	Amperes
TUBE VOLTAGE DROP (Approx.)	15	10	Volts

* Filament transformer should be designed for 10 amperes per tube.

** For supply frequency up to 150 cycles.

§ Averaged over a period of 15 seconds.

INSTALLATION AND APPLICATION

The base pins of the 872 and 872-A fit the standard transmitting 4-contact socket, such as the RCA type UT-541A. 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.

For outline drawing, refer to Type 805.

During initial operation, the 872 and 872-A should be operated for 15 minutes with normal filament voltage and no plate voltage in order to distribute the mercury properly. This procedure need not be repeated unless, during subsequent handling, the mercury is spattered on the filament and plate.

The filament of the 872 or 872-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.

For additional information, see chapter on RECTIFIERS and FILTERS.

Top View of Socket Connections

