

**MACHLETT**

# ML-222A

## DESCRIPTION AND RATINGS

### DESCRIPTION

The ML-222A is a high-vacuum, water-cooled rectifier tube having maximum ratings of 25 PKV inverse voltage and 5 amperes peak anode current. It is designed for use as a half-wave rectifier in power supplies for radio-transmitting and radio-communication service. The cathode is a pure-tungsten filament.

The ML-222A embodies all the techniques and skills that

have been inherently a part of Machlett Laboratories, Inc., since 1897. All parts are thoroughly processed by special Machlett techniques, which prevent contamination and assure complete and permanent outgassing. The tube is exhausted by a straight-line, high-voltage process assuring the same high standards as characterize the Machlett line of high-voltage x-ray rectifiers.

### GENERAL CHARACTERISTICS

#### Electrical

Filament Voltage .....	21.5 volts
Filament Current, approximate .....	41.0 amperes
Tube Voltage Drop, approximate (I <sub>b</sub> =5.0 amperes) .....	2000 volts

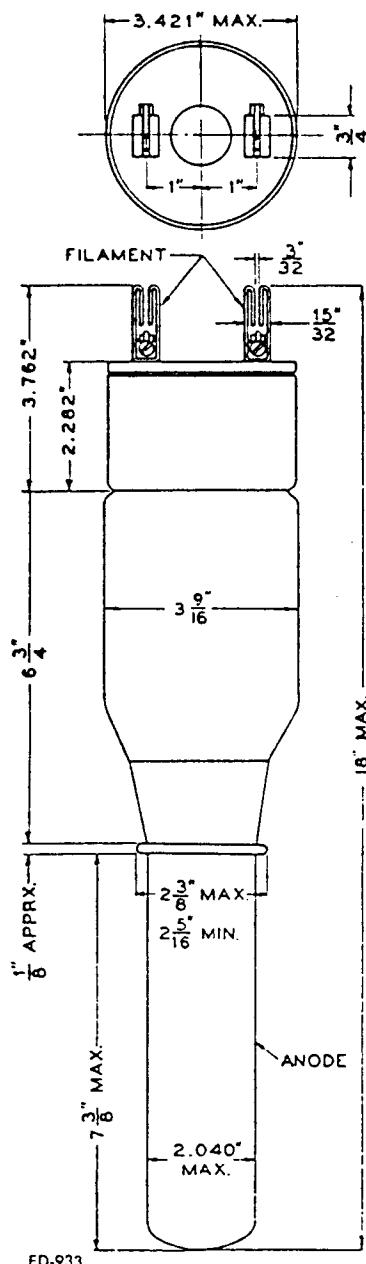
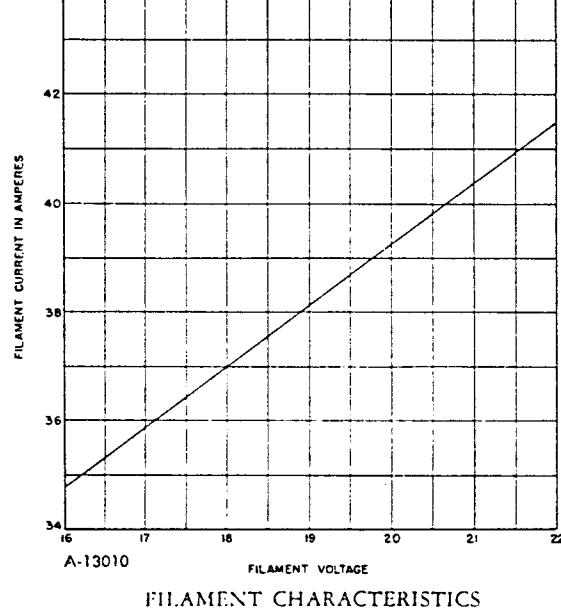
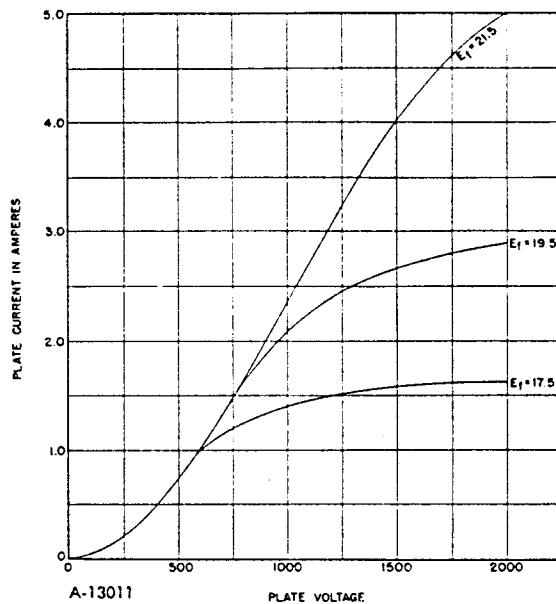
#### Mechanical

Mounting Position .....	Vertical, anode down
Type of Cooling .....	Water
Water Flow on Anode, minimum .....	1 gpm
Maximum Outgoing Water Temperature .....	75 °C

### MAXIMUM RATINGS

Peak Inverse Anode Voltage .....	25000 volts
Peak Anode Current .....	5.0 amperes
Load Current (Average D-C) Circuit Application .....	Unfiltered
Single-phase, double half-wave .....	3.0 amperes
Single-phase, double half-wave, 4 tube series circuit .....	3.0 amperes
Three-phase, 6-tube, series-Y circuit .....	5.0 amperes
Three-phase, double-Y interconnected .....	8.5 amperes

**WARNING:** Operation of this tube may produce soft x-rays, which constitute a health hazard. Adequate rayproof shielding must therefore be provided in the equipment.



THE MACHLETT LABORATORIES, INC.

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