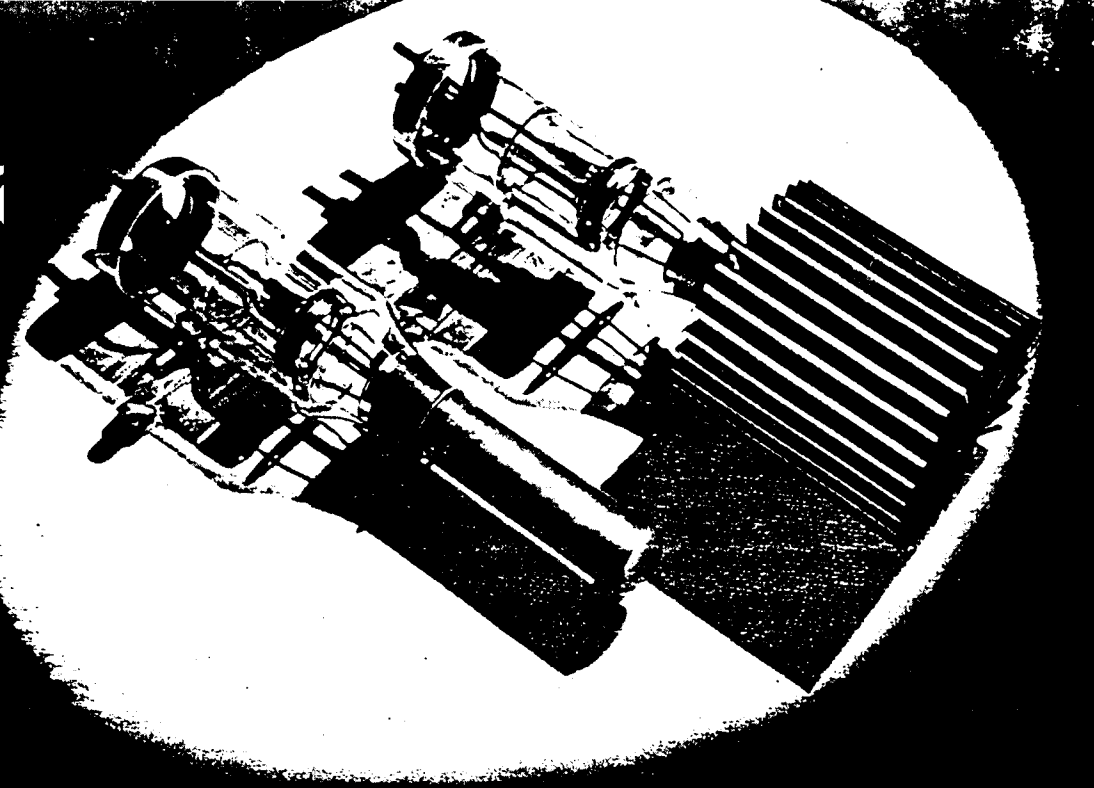




ML-220C ML-220CA

DESCRIPTION AND RATINGS



DESCRIPTION

The ML-220C and ML-220CA are three-electrode tubes designed for use as modulators, amplifiers, or oscillators in radio-transmitting service. The cathode for each type is a pure-tungsten filament. The anode of the ML-220C is water cooled and is capable of dissipating 10 kW. The anode of the ML-220CA is forced-air cooled and is capable of dissipating 5 kW. Maximum ratings of 15 kVdc and 1.5 amperes apply at frequencies up to 4 Mc; operation at 12 Mc is permissible with plate voltage reduced to 5 kVdc.

The ML-220C and ML-220CA embody 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 tubes are exhausted by a straight-line, high-voltage process assuring the same high standards as characterize the Machlett line of high- and super-voltage x-ray tubes.

GENERAL CHARACTERISTICS

Electrical

Filament Voltage	21.5 volts
Filament Current at 21.5 volts	41 amperes
Amplification Factor	40
Grid-Plate Transconductance	
ML-220C	5000 uMhos
ML-220CA	4400 uMhos
Interelectrode Capacitances	
Grid-Plate	24 uuf
Grid-Filament	20 uuf
Plate-Filament	2.5 uuf

Mechanical

Mounting Position	Vertical, anode down	
Type of Cooling	ML-220C	ML-220CA
Water Flow on Anode (minimum)	Water	Forced-air
Maximum Outgoing Water Temperature	5	— gpm
Required Air Flow on Anode	—	— °C
Maximum Anode Temperature	—	600 cfm
		120 °C