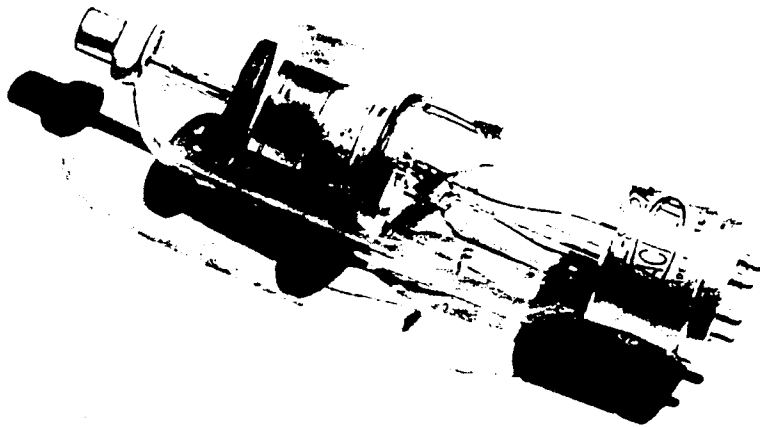




ML-872A
ML-8008

DESCRIPTION & RATINGS



DESCRIPTION

The ML-872A and ML-8008 are two-electrode mercury-vapor tubes designed for use as half-wave rectifiers in radio-transmitting and r.f. heating equipment. Low internal voltage drop, permitting the tube to conduct at relatively low applied voltages, contributes to efficient operation. Both

tubes are identical with respect to characteristics, differing only in the types of bases provided. Maximum ratings of 10 PKV inverse anode voltage and 1.25 amperes average anode current apply at frequencies of 25 to 150 cycles per second.

GENERAL CHARACTERISTICS

Electrical

Filament Voltage	5	Volts
Filament Current	7.5	Amperes
Filament Heating Time, Minimum*	30	Seconds
Tube Voltage Drop, approximate	10	Volts

Mechanical

Mounting Position	Vertical, Base Down
Type of Cooling	Convection
Base, ML-872A	Super-Jumbo, 4-Pin Bayonet, RMA No. A4-29
ML-8008	Super-Jumbo, 4-Pin Bayonet, RMA No. A4-18
Cap	Medium Metal, RMA No. C1-5
Net Weight, approximate	1/2 Pound

* Before applying anode voltage, sufficient time must be allowed to bring the condensed mercury temperature, measured at the top edge of the base, within the specified range.

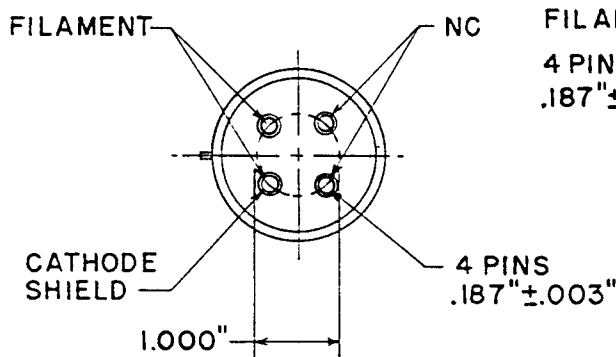
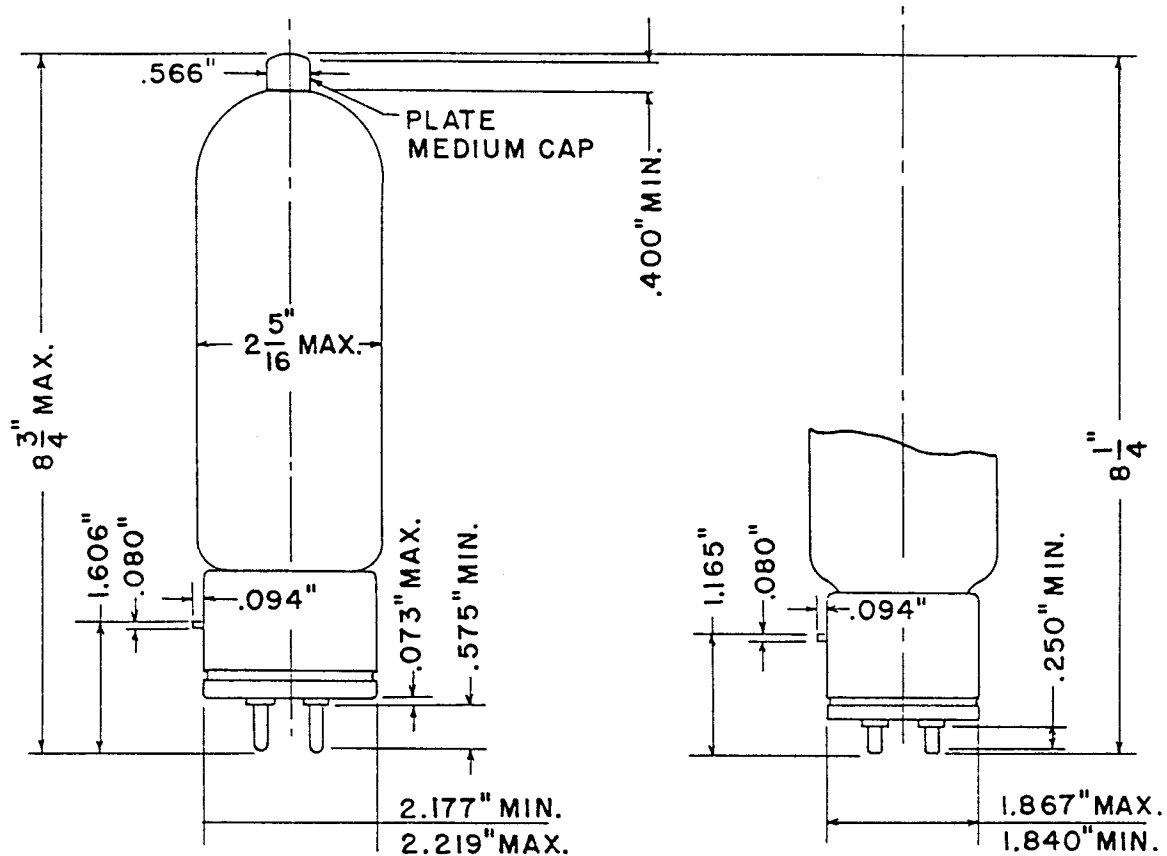
MAXIMUM RATINGS

Maximum Peak Inverse Anode Voltage		
150 Cycles or Less	5000	10000 Volts
Condensed Mercury Temperature Range	20-70	20-60 °C
Maximum Anode Current		
Instantaneous, 25 to 150 Cycles	5.0	Amperes
Average, 15 Seconds Averaging Time	1.25	Amperes
Surge, for Design Only	50.0	Amperes
Duration of Surge Current	0.3	Second

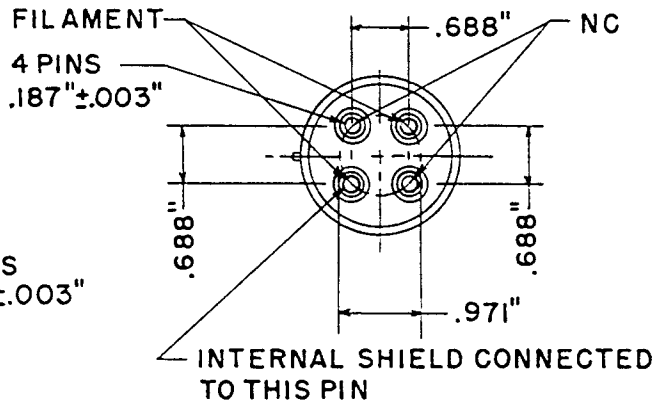
APPLICATION NOTES

Shielding and r.f. filter circuits should be isolated from the transmitter or r.f. heating equipment as much as possible in order to avoid the detrimental effects of magnetic and electro-static fields. These fields tend to produce breakdown in the mercury vapor, are detrimental to tube life, and make filtering difficult. External shielding should be used when

the tubes are in proximity to these external fields. R-f filtering should be used when the tubes are affected by r-f voltages. When shields are used, special attention must be given to adequate ventilation and to maintenance of normal condensed-mercury temperature.



ML-8008



ML-872A

MACHLETT LABORATORIES, INC.

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