

ML-322

DESCRIPTION & RATINGS

DESCRIPTION

The ML-322 is an ultra-high-frequency diode of the planar-electrode type designed for use as a modulation clipper at frequencies up to 1500 Mc. Lead inductances and r-f losses are minimized by a compact, rugged construction with

ring-type seals, making the tube ideally suited to cavity-type circuits. The electrode spacing is about 0.008". The cathode is an indirectly-heated, oxide-coated disc. The anode is convection cooled and is capable of dissipating 15 watts.

GENERAL CHARACTERISTICS

Electrical

Heater Voltage	6.3 Volts
Heater Current at 6.3 volts, approximate	.95 Amps
Heater Heating Time, minimum (Before Applying Plate Voltage)	60 Seconds
Interelectrode Capacitance	3.5 uuf

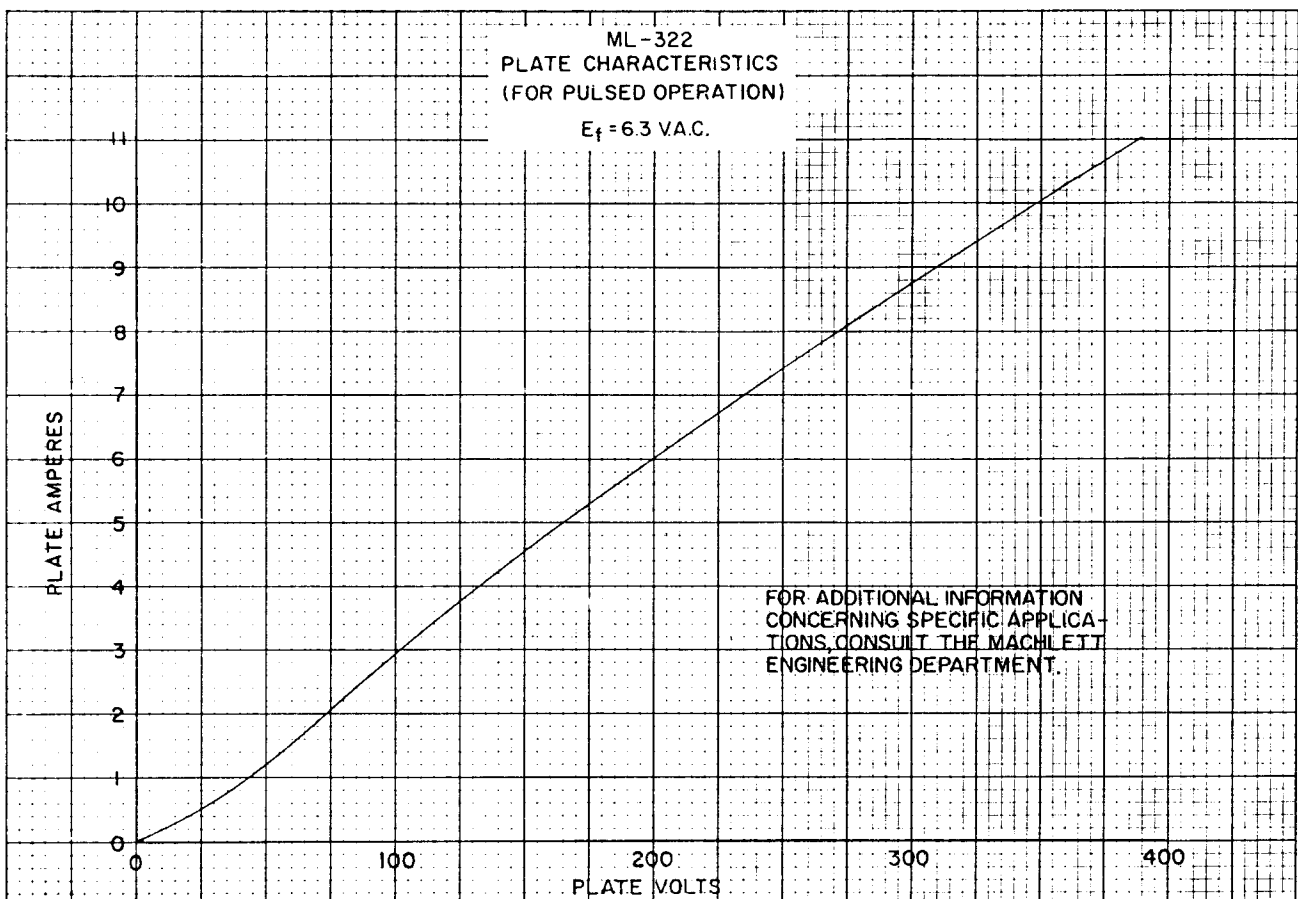
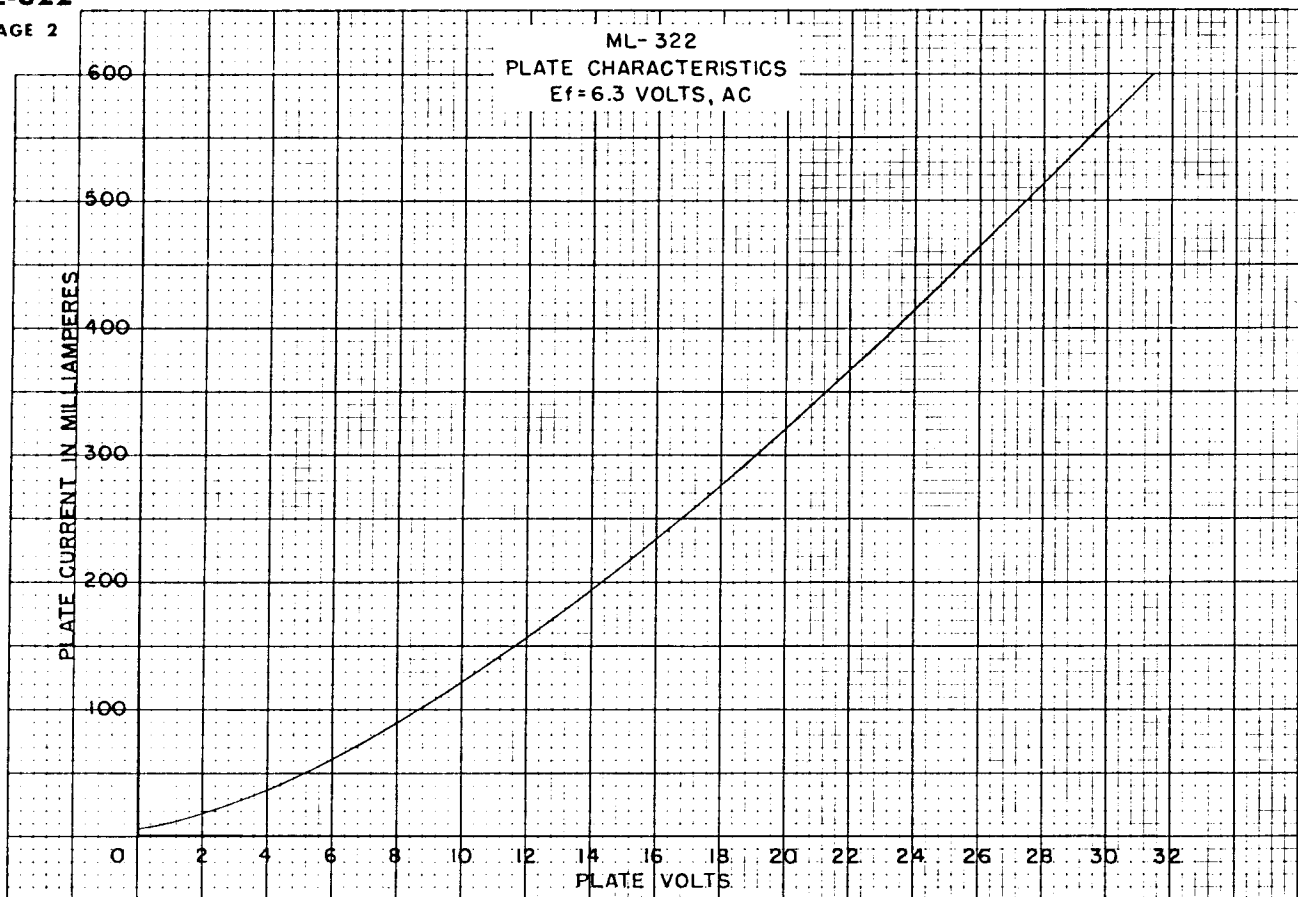
Mechanical

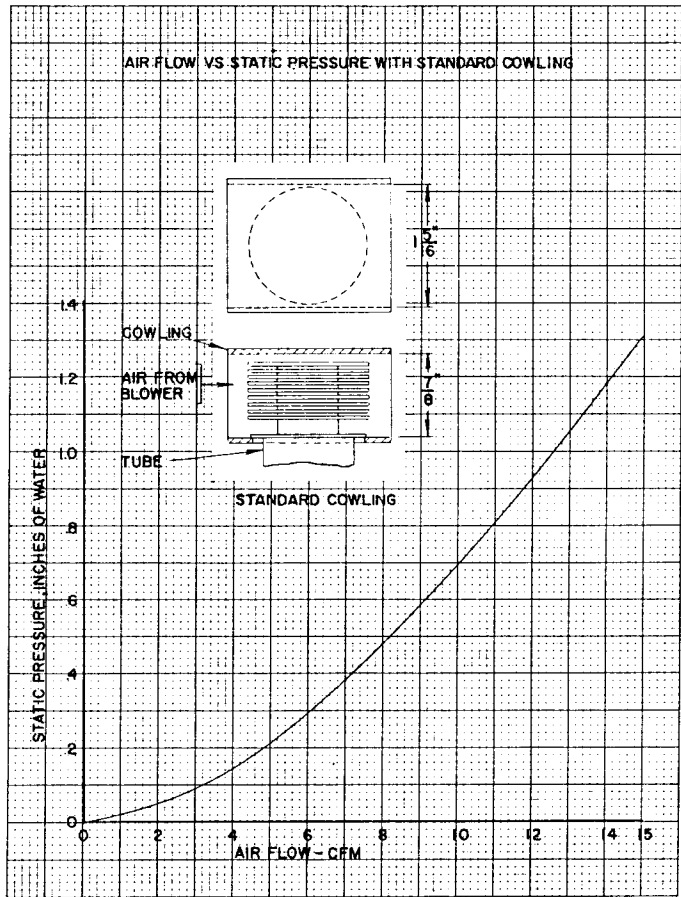
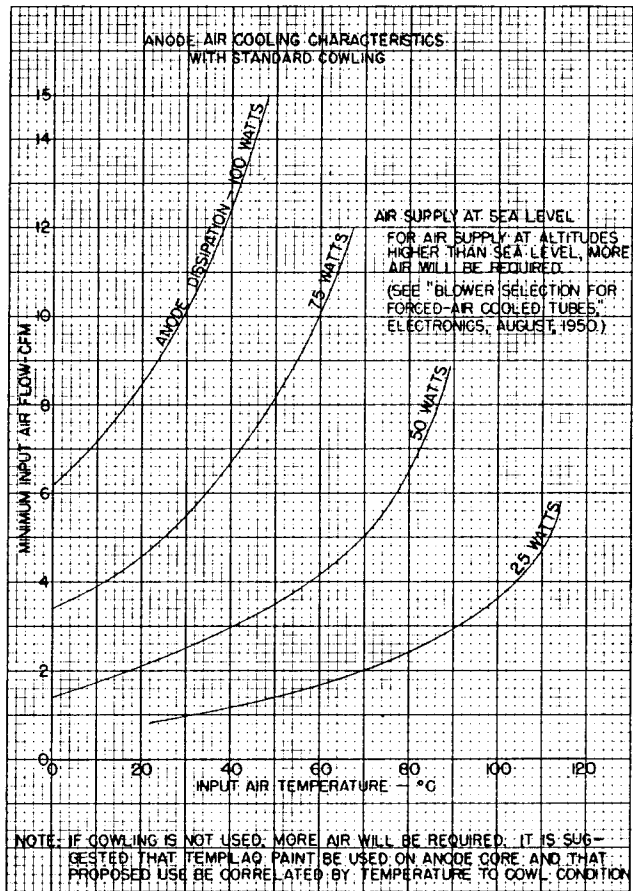
Mounting Position	Optional
Maximum Seal Temperature	160 °C
Net Weight, approximate	0.25 lbs.

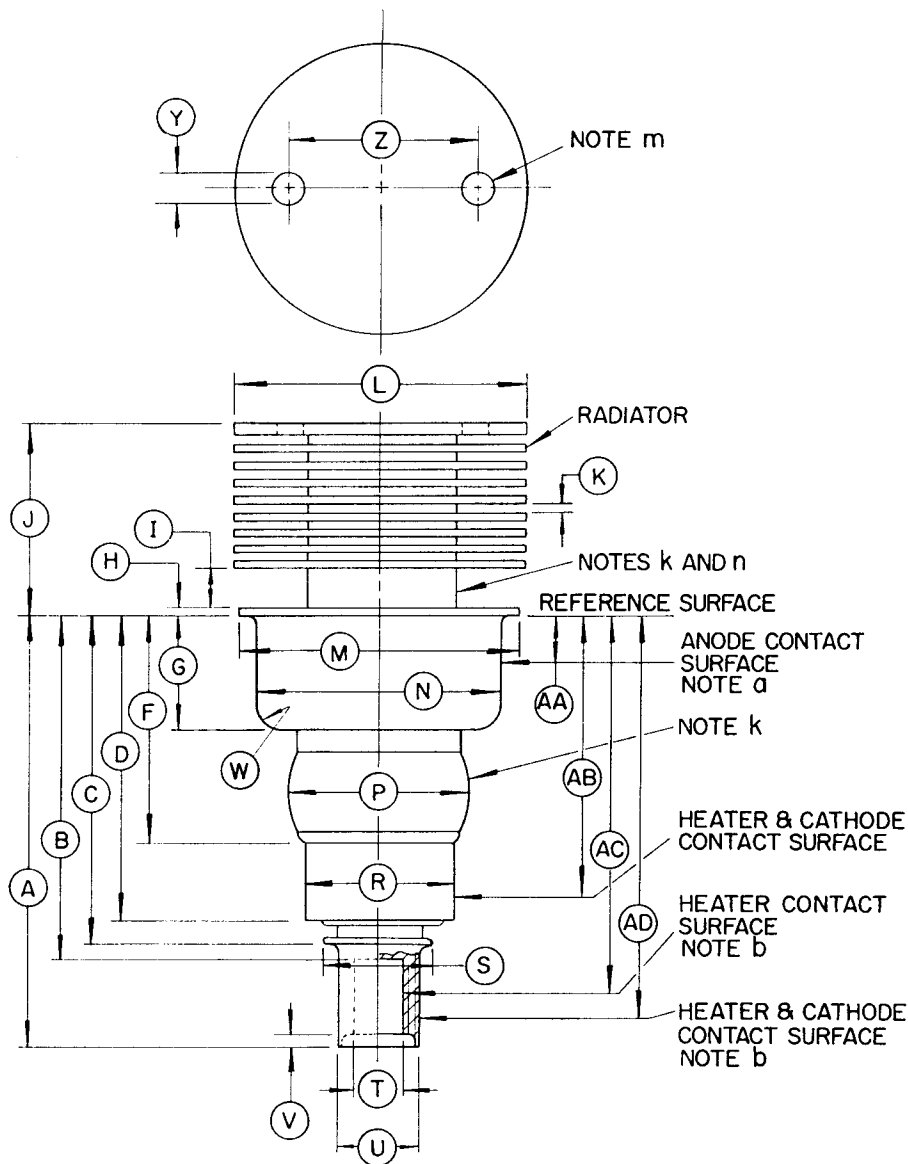
MAXIMUM RATINGS

Maximum Ratings, Absolute Values	
Peak Inverse Voltage	800 Volts
Peak Plate Current	600 mAdc
Average Plate Current	100 mAdc
Average Plate Dissipation	15 watts*

* Plate dissipation up to 100 watts may be obtained with forced-air cooling.







DIMENSIONS FOR
OUTLINE (INCHES)

Ref.	Minimum	Maximum
A	1.788	1.858
B	—	1.517
C	—	1.458
D	1.252	1.292
F	—	1.000
G	.459	.479
H	—	.040
I	.125	—
J	.736	.826
K	.015	—
L	1.235	1.265
M	1.788	1.199
N	1.021	1.039
P	—	.812
R	.652	.668
S	—	.545
T	.213	.223
U	.312	.328
V	—	.086
W	—	.100
Y	.105	.145
Z	.650	.850

NOTES

- The total indicated runout of the anode contact surface with respect to the cathode contact surface will not exceed 0.030 inch.
- The total indicated runout of the heater contact surface with respect to the cathode contact surface will not exceed 0.018 inch.
- Do not clamp or locate on this surface.
- Hole provided for tube extractor through the top fin only.
- Measure anode shank temperature on this surface.

DIMENSIONS FOR ELECTRODE
CONTACT AREA (INCHES)

Ref.	Dimension	Contact
AA	$0.195 \pm .163$	Anode
AB	$1.210 \pm .040$	Cathode & Heater
AC	$1.610 \pm .092$	Heater
AD	$1.623 \pm .165$	Cathode & Heater

DIMENSIONS — ML-322

MACHLETT LABORATORIES, INC.

SPRINGDALE



CONNECTICUT

U. S. A.