



ELECTRONIC TUBE REFERENCE

102A

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
RECTIFIER

Machlett high-vacuum industrial rectifier for high-power applications such as electrostatic precipitation. Rated for approximately 75 kV peak inverse voltage and 750 mA peak anode current from a rugged tungsten filament.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	20 V / 19 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
MAXIMUM PLATE DISSIPATION	750 W
PEAK INVERSE VOLTAGE	75000 V
PEAK FORWARD CURRENT	750 mA
FORWARD VOLTAGE DROP	400 V
WARM-UP TIME	30 s
<i>Promoted fields populated from explicitly published ratings/characteristics; service-specific data retained as parameters.</i>	

The ML-102A is a high-vacuum rectifier tube having maximum ratings of 75 PKV inverse voltage and 750 MA peak high-power-level applications. These features insure ruggedness, long life, low internal voltage drop and high average ticle precipitation service of moderately high power require-load current capacity. The cathode is a pure tungsten filaments, where its low initial cost, long life and

high current ment of the catenary type, allowing close anode-to-cathode capacity make it highly practical and economical to employ spacing without distortion of the filament by electrostatic

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 Machlette Laboratories

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1971 MACHLETTE LABORATORIES

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
imum ratings of [1]	75 mA	imum ratings of 75 PKV inverse voltage and 750 MA peak high-power-level applications. These features insure rugged-
imum ratings of [2]	750 mA	imum ratings of 75 PKV inverse voltage and 750 MA peak high-power-level applications. These features insure rugged-
Filament Voltage	20 V	Filament Voltage ... 20 Volts
Filament Current, approximate	19 A	Filament Current, approximate ... 19 Amps
Filament Heating Time, minimum	30 s	Filament Heating Time, minimum ... - 30 Secs
Tube Voltage Drop, maximum	400 V	Tube Voltage Drop, maximum 400 Volts
Peak Inverse Anode Voltage TSP	75000 V	Peak Inverse Anode Voltage TSP 75000 Volts
Peak Anode Current ... [T TSR	0.75	Peak Anode Current ... [T TSR 0.75 Amp
Plate Dissipation	750 W	Plate Dissipation ... 750 Watts
ML	102	ML-102A LOAD CURRENT RATINGS
PLATE VOLTAGE — PEAK YOLTS A [1]	8474 V	PLATE VOLTAGE — PEAK YOLTS A-8474 FILAMENT VOLTS A-8473
PLATE VOLTAGE — PEAK YOLTS A [2]	8473 V	PLATE VOLTAGE — PEAK YOLTS A-8474 FILAMENT VOLTS A-8473

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

