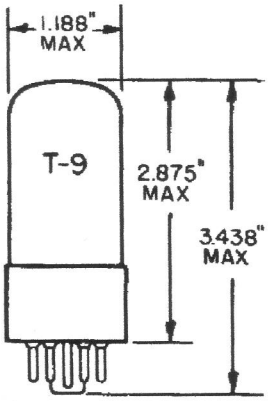
TUNG-SOL

DIODE-BEAM PENTODE



GLASS BULB
INTERMEDIATE SHELL
8 PIN OCTAL B8-6
OUTLINE DRAWING
JEDEC 9-15

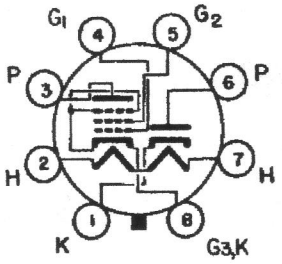
FOR

POWER RECTIFIER AND

AUDIO OUTPUT APPLICATIONS

COATED UNIPOTENTIAL CATHODES

ANY MOUNTING POSITION



BOTTOM VIEW

BASING DIAGRAM
JEDEC 8A0

THE 117L7/M7GT COMBINES A HALF-WAVE RECTIFIER AND A BEAM POWER AMPLIFIER IN THE SAME ENVELOPE. IT IS DESIGNED FOR AC DC SERVICE FROM A 117 VOLT LINE IN THREE WAY PORTABLE RECEIVERS. IT HAS FOUND USE IN A NUMBER OF OTHER APPLICATIONS.

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	117	VOLTS	90	MA.
LIMITS OF SUPPLIED VOLTAGE			117±12	VOLTS
MAXIMUM DC HEATER-CATHODE VOLTAGE			175	VOLTS

MAXIMUM RATINGS

DESIGN CENTER VALUES - SEE EIA STANDARD RS-239

DIODE UNIT

AC PLATE VOLTAGE, RMS	117	VOLTS
PEAK INVERSE VOLTAGE	350	VOLTS
STEADY-STATE PEAK PLATE CURRENT	450	MA.

PENTODE UNIT

PLATE VOLTAGE	117	VOLTS
GRID 2 VOLTAGE	117	VOLTS
PLATE DISSIPATION	6.0	WATTS
GRID 2 DISSIPATION	1.0	WATTS

CONTINUED ON FOLLOWING PAGE

CONTINUED FROM PRECEDING PAGE

CHARACTERISTICS AND OPERATING CONDITIONS

DIODE UNIT

TUBE VOLTAGE DROP:		
MEASURED WITH APPLIED DC AT 150 MA PLATE CURRENT	16	VOLTS

HALF-WAVE POWER RECTIFIER

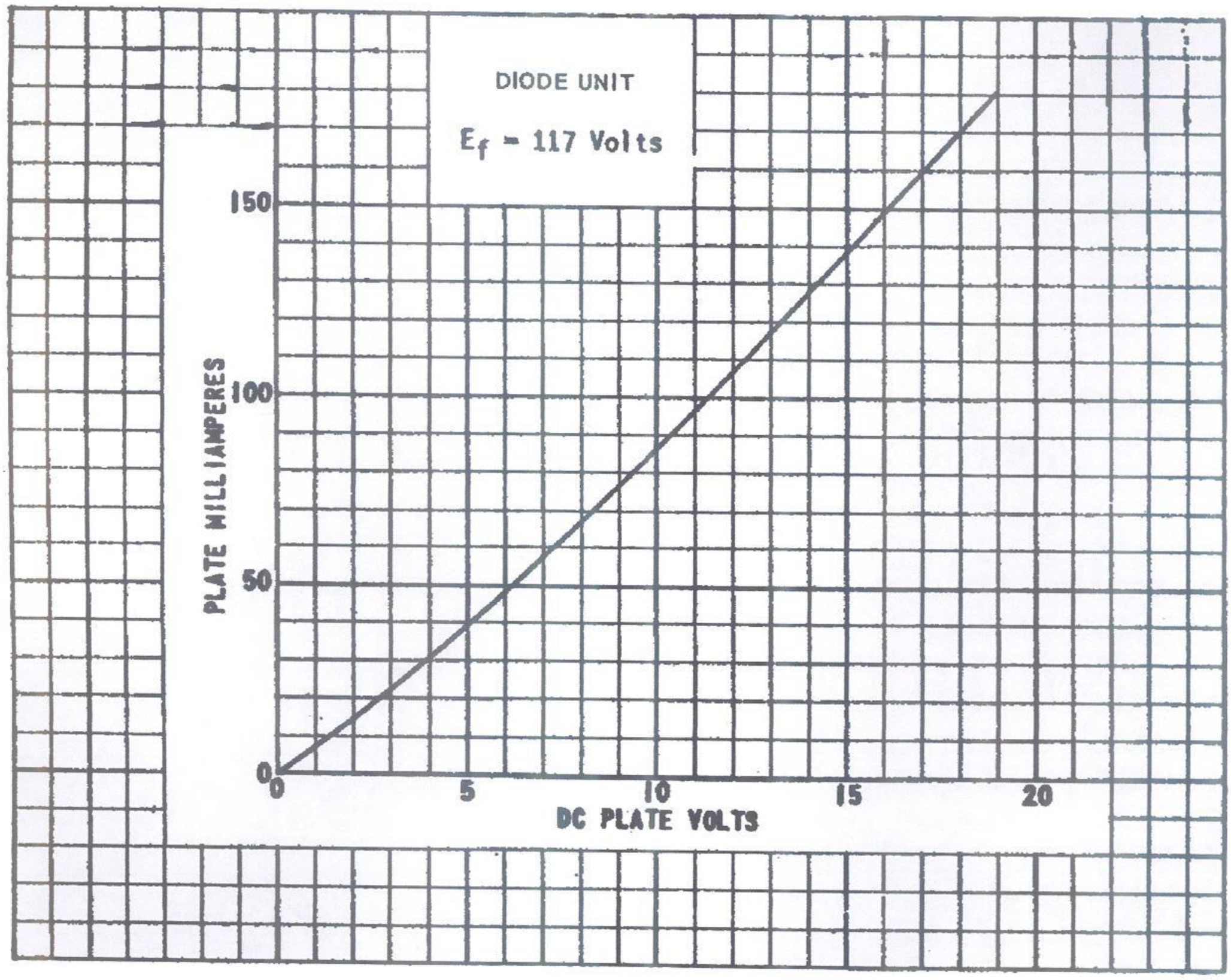
AC PLATE VOLTAGE, RMS	117	VOLTS
DC OUTPUT CURRENT	75	MA.
MINIMUM TOTAL EFFECTIVE PLATE SUPPLY IMPEDANCE	15	OHMS

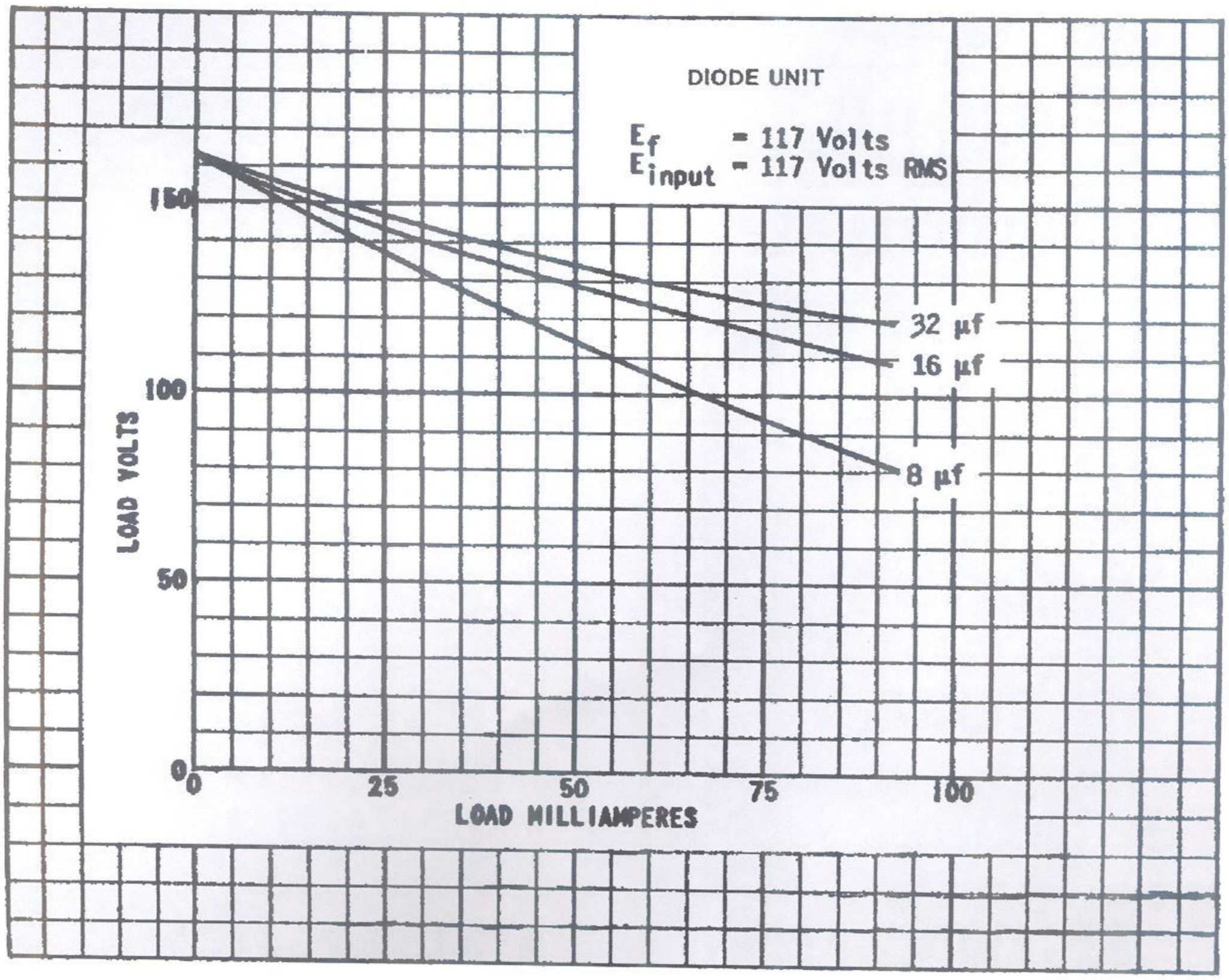
PENTODE UNIT

CLASS A1 AUDIO POWER AMPLIFIER

PLATE VOLTAGE	105	VOLTS
GRID 2 VOLTAGE	105	VOLTS
GRID VOLTAGE	-5.2	VOLTS
PEAK AF GRID VOLTAGE	5.2	VOLTS
ZERO-SIGNAL PLATE CURRENT	43	MA.
MAXIMUM-SIGNAL PLATE CURRENT	43	MA.
ZERO-SIGNAL GRID 2 CURRENT (NOMINAL)	4	MA.
MAXIMUM-SIGNAL GRID 2 CURRENT (NOMINAL)	5.5	MA.
PLATE RESISTANCE (APPROX.)	17,000	OHMS
TRANSCONDUCTANCE	5,300	μMHOS
LOAD RESISTANCE	4,000	OHMS
TOTAL HARMONIC DISTORTION	5.0	PERCENT
MAXIMUM-SIGNAL POWER OUTPUT	0.85	WATT

117L7/M7GT


DIODE UNIT
E_f = 117 Volts
PLATE MILLIAMPERES
150
100
50
0
0
5
10
15
20
DC PLATE VOLTS


DIODE UNIT
E_f = 117 Volts
E_{input} = 117 Volts RMS
32 µf
16 µf
8 µf
LOAD VOLTS
150
100
50
0
0
25
50
75
100
LOAD MILLIAMPERES

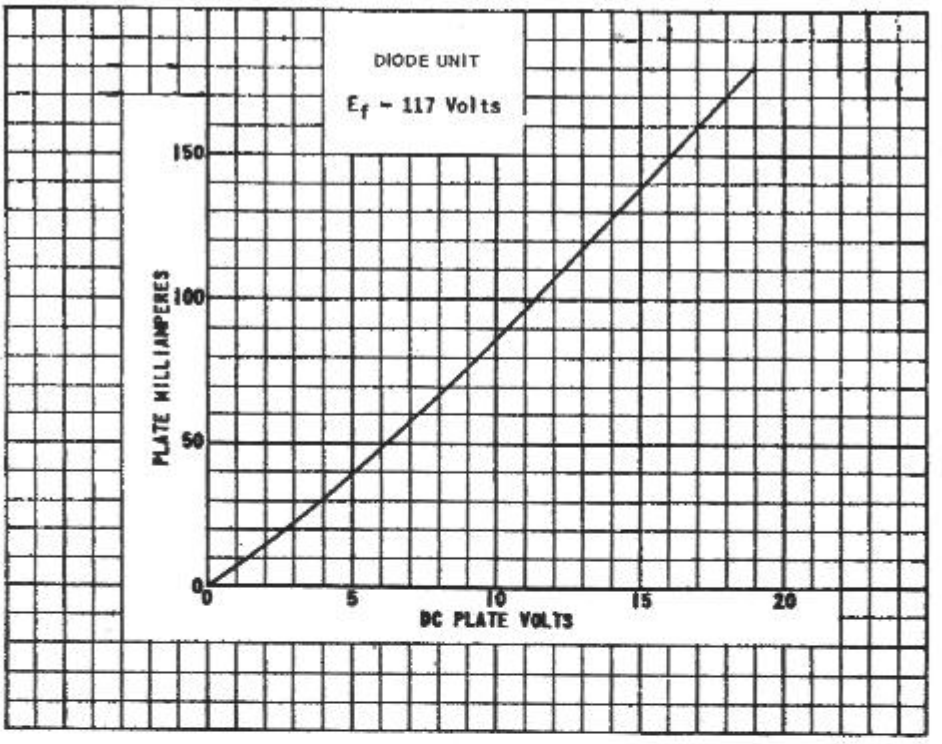

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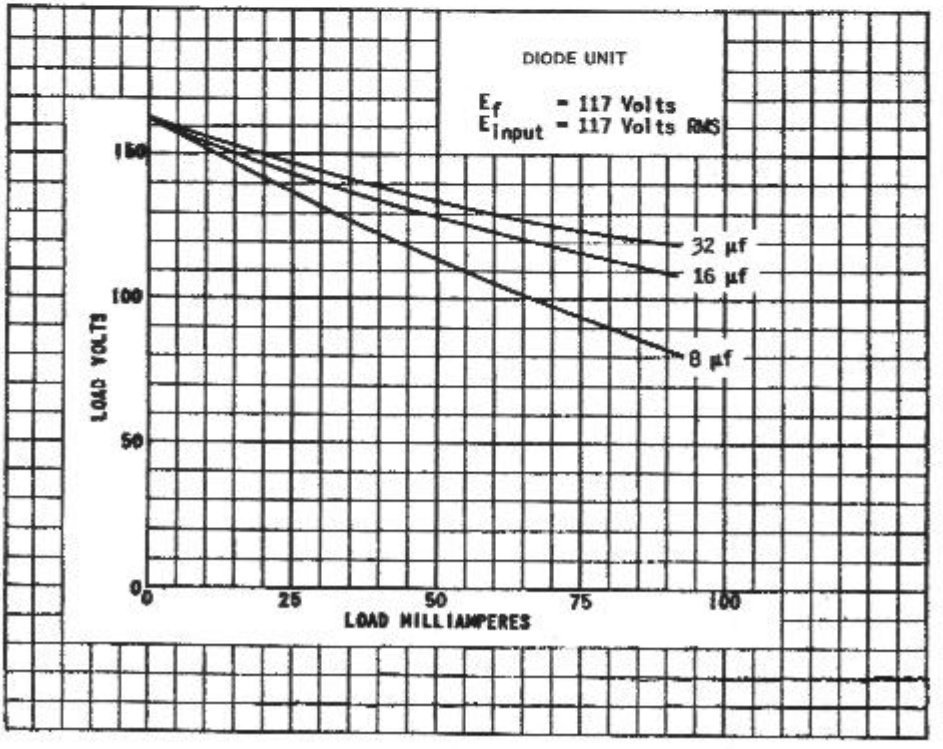
PLATE MILLIAMPERES
150
100
50
0
0
5
10
15
20
DC PLATE VOLTS


DIODE UNIT
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100
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32 µf
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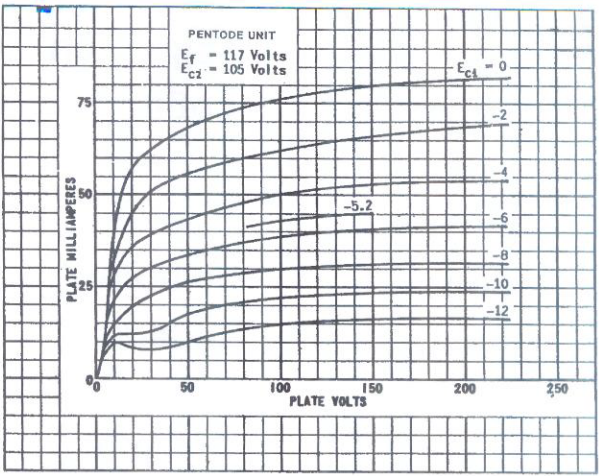

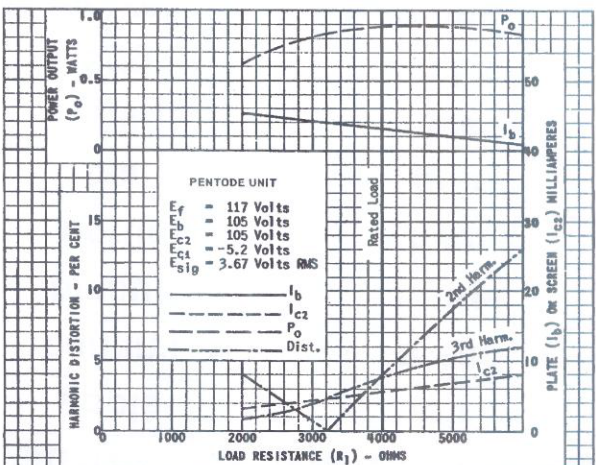

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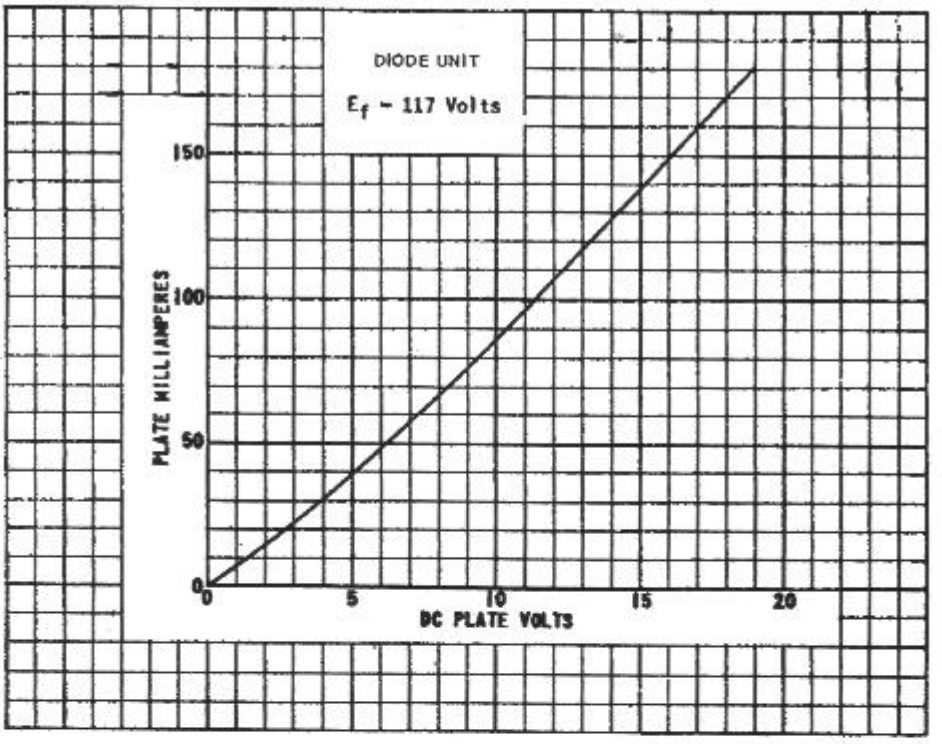
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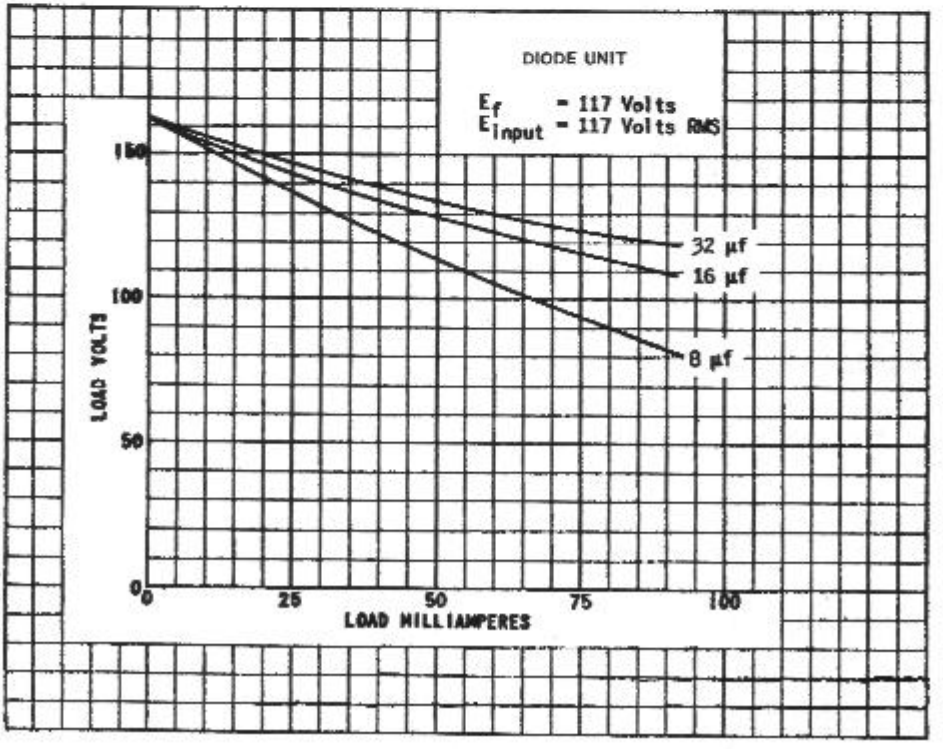
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