



715-C

715-C

PULSE AMPLIFIER TETRODE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage 26 $\pm$ 2.5 . . . ac or dc volts

Current 2.1 amp

Minimum Heating Time . . . 3 minutes

Direct Interelectrode Capacitances:^oGrid No.1 to Plate 2 max. μ fInput 37.5 μ fOutput 7.5 μ f^o With no external shield.

Mechanical:

Mounting Position Vertical, base up or down

Overall Length 5-3/4" $\pm$ 1/8"Seated Length 5-5/16" $\pm$ 1/8"

Maximum Diameter 2-9/16"

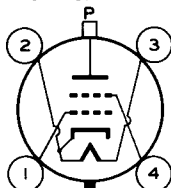
Bulb T-20

Cap Medium with Dished Flange

Base Medium-Ceramic-Wafer Jumboid 4-Pin

BOTTOM VIEW

Pin 1-Grid No.1

Pin 2-Heater,
Cathode

Pin 3-Heater

Pin 4-Grid No.2

Cap - Plate

MODULATOR - Pulsed Rectangular-Wave

With Inductive Load

Maximum CCS* Ratings, Absolute Values:

DC PLATE SUPPLY VOLTAGE* 15000 max. volts

PEAK POSITIVE PLATE VOLTAGE 18000 max. volts

DC GRID-No.2 (SCREEN) SUPPLY VOLTAGE* . . . 1350 max. volts

DC GRID-No.1 (CONTROL GRID)
SUPPLY VOLTAGE -1000 max. volts

PEAK GRID-No.1 VOLTAGE:

Negative Value 1200 max. volts

Positive Value 300 max. volts

PEAK PLATE CURRENT**, for duty factor[□]
not exceeding 0.001 15 max. amp

* Continuous Commercial Service.

[□] Duty Factor equals product of pulse duration in seconds and the pulse repetition frequency in cycles per second.

** For peak currents in excess of 5 amperes, the product of peak plate current in amperes and pulse duration in microseconds should not exceed 30, and the tube should not be operated longer than 5 microseconds in any 100-microsecond interval.

For peak currents less than 5 amperes, the duty factor is determined by the maximum plate-dissipation rating of 60 watts.

*: See next page.

SEPT. 15, 1949

TUBE DEPARTMENT

TENTATIVE DATA

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

715-C



715-C

PULSE AMPLIFIER TETRODE

PEAK GRID-No.2 CURRENT	5 max.	amp
PEAK GRID-No.1 CURRENT	2 max.	amp
PLATE INPUT	225 max.	watts
GRID-No.2 INPUT	8 max.	watts
GRID-No.1 INPUT	1 max.	watt
PLATE DISSIPATION	60 max.	watts

Typical Operation:*Duty Factor of 0.001*

DC Plate Supply Voltage*	15000	volts
DC Grid-No.2 Supply Voltage*	1250	volts
DC Grid-No.1 Supply Voltage	-800	volts
Peak Positive Grid-No.1 Voltage	+225	volts
Plate Current:		
DC Value	0.015	amp
Peak Value	15	amp
DC Grid-No.2 Current	0.0015	amp
DC Grid-No.1 Current	0.010	amp
Load Resistance	800	ohms

CHARACTERISTICS RANGE VALUES FOR EQUIPMENT DESIGN

	<u>Note</u>	<u>Min.</u>	<u>Max.</u>	
Heater Current	1	1.9	2.3	amp
Grid-No.1-to-Plate Capacitance	-	-	2	$\mu\mu\text{f}$
Input	-	30	45	$\mu\mu\text{f}$
Output	-	5	10	$\mu\mu\text{f}$

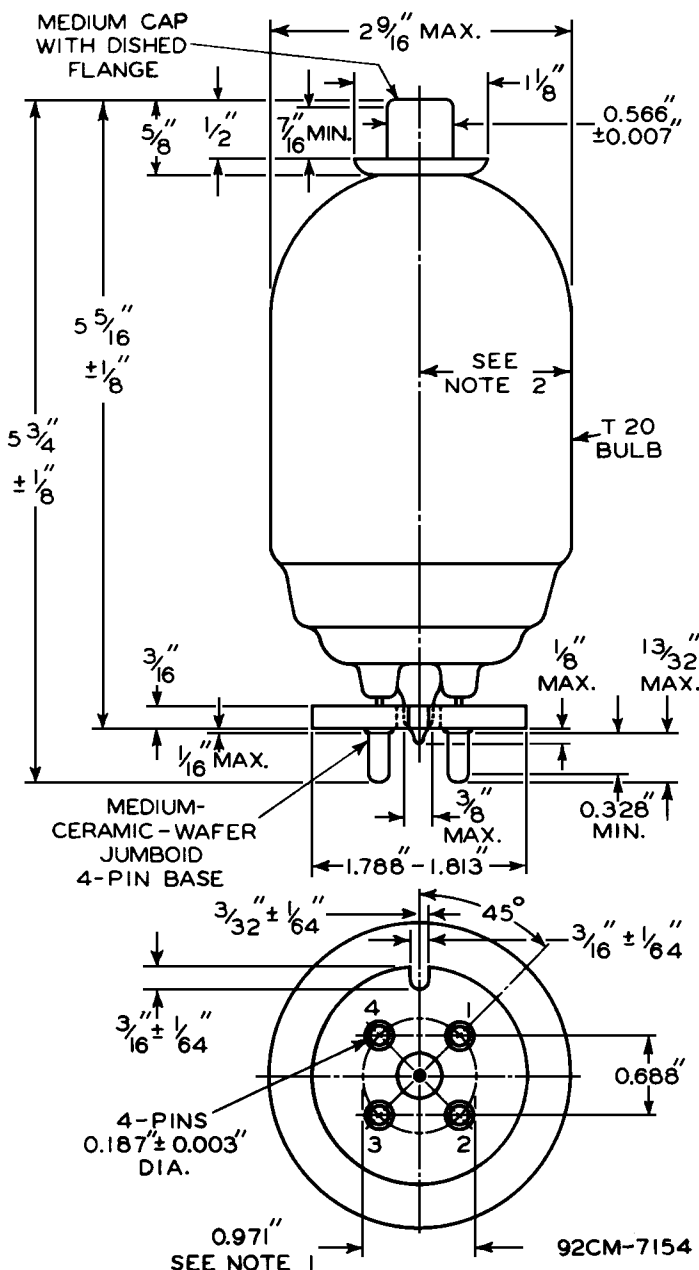
Note 1: With 26 volts on heater.

* For tube protection, it is essential that the dc resistance in series with the plate supply and the grid-No.2 supply should be adequate to limit the short-circuit current to 0.5 ampere in either circuit.



715-C

PULSE AMPLIFIER TETRODE



NOTE 1: PINS WILL FIT A FLAT-PLATE GAUGE HAVING THICKNESS OF 1/4" AND FOUR HOLES 0.2140" $\pm$ 0.0005" SO LOCATED ON A 0.9710" $\pm$ 0.0005" DIAMETER CIRCLE THAT THE DISTANCE ALONG THE CHORD BETWEEN ANY TWO ADJACENT HOLE CENTERS IS 0.6875" $\pm$ 0.0005". GAUGE IS ALSO PROVIDED WITH A 7/16" DIAMETER HOLE CONCENTRIC WITH PINCIRCLE FOR THE EXHAUST TIP.

NOTE 2: WHEN TUBE IS ROTATED ABOUT AXIS OF ITS BASE, THE MAXIMUM RADIAL DISTANCE BETWEEN ANY POINT ON THE BULB AND THE ROTATIONAL AXIS DOES NOT EXCEED 1-13/32".

SEPT. 15, 1949

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

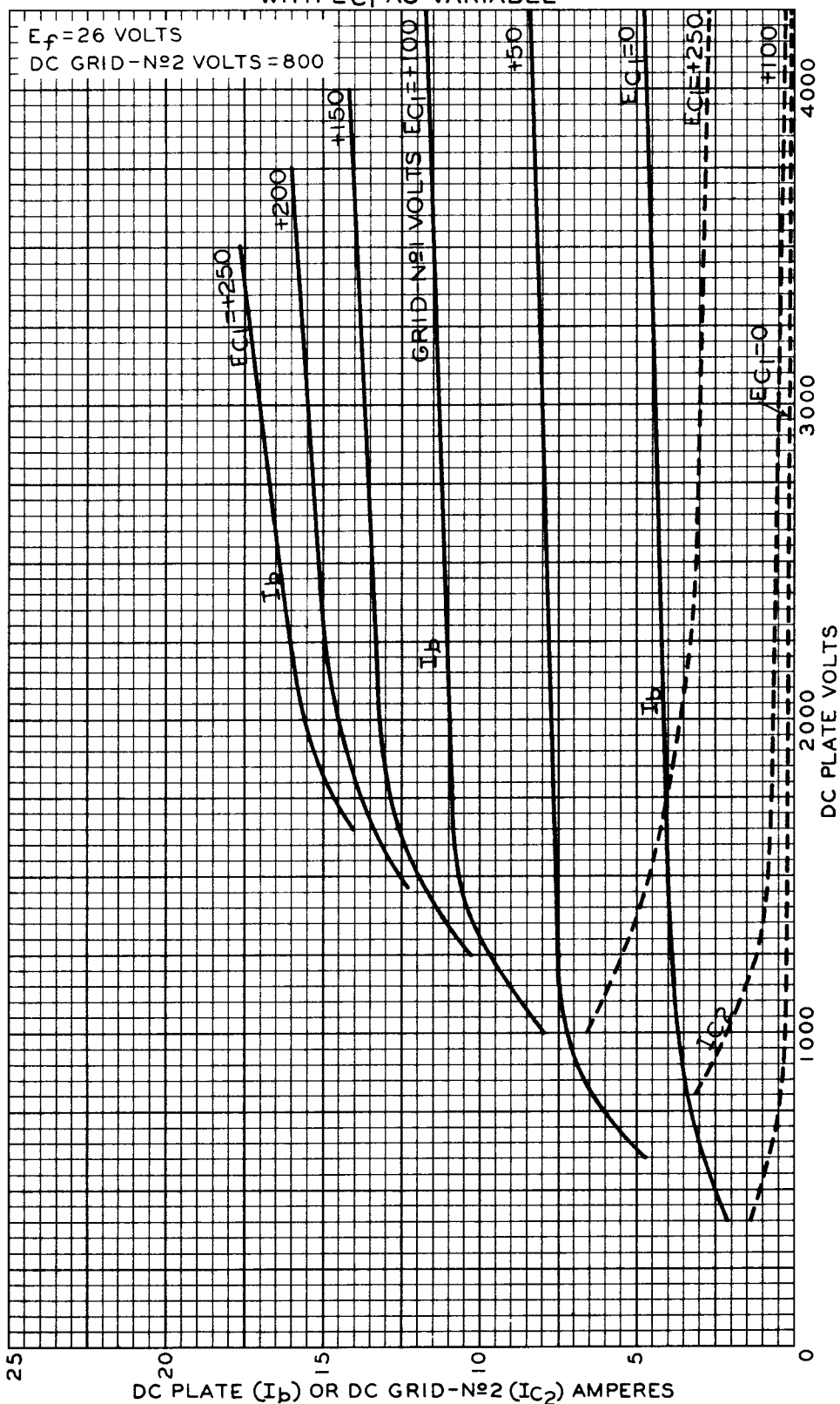
CE-7154

715-C



715-C

AVERAGE PLATE CHARACTERISTICS WITH E_{C1} AS VARIABLE



FEB. 21, 1949

TUBE DEPARTMENT

92CM-7186

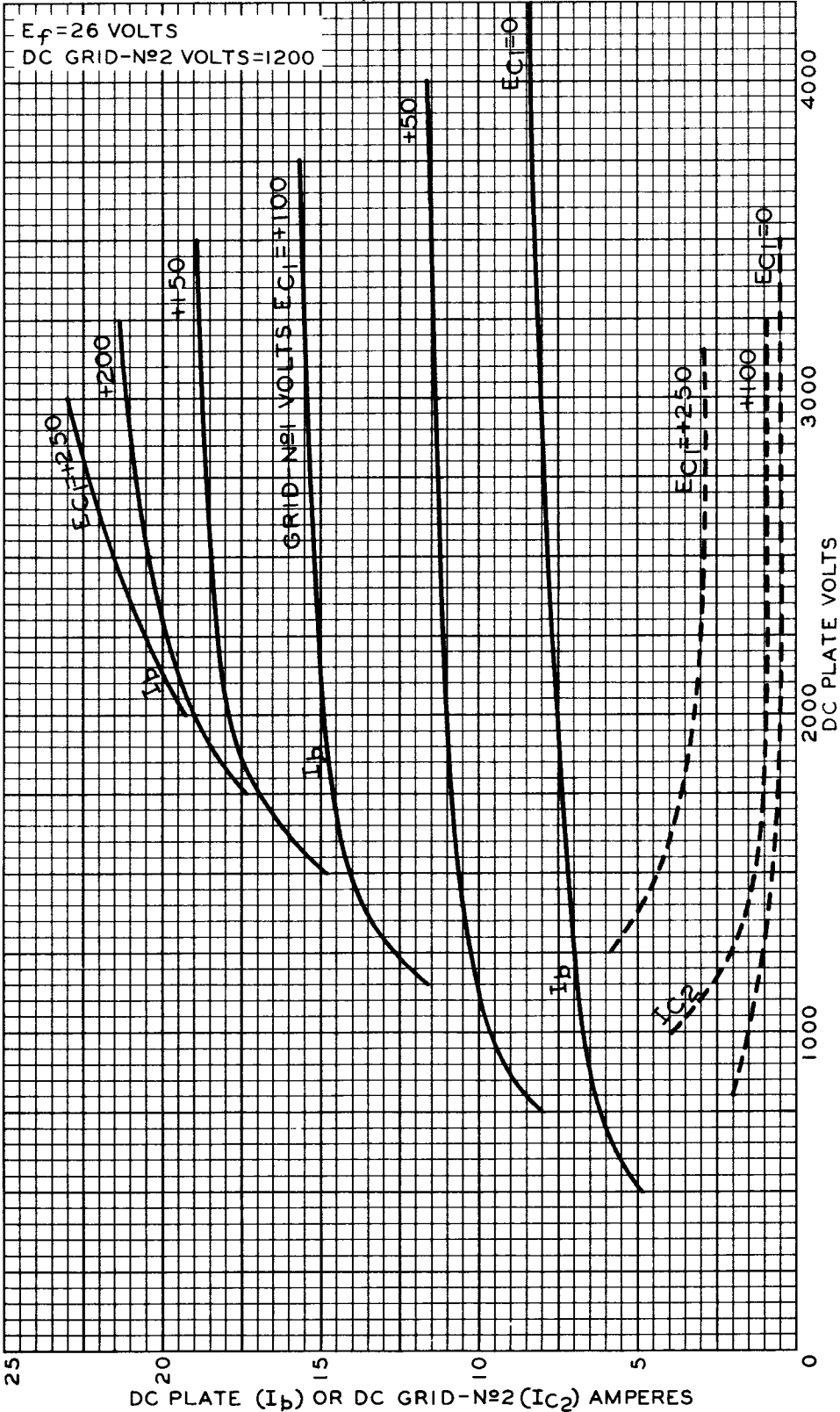
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY



715-C

715-C

AVERAGE PLATE CHARACTERISTICS WITH E_{C1} AS VARIABLE



FEB. 22, 1949

TUBE DEPARTMENT

92CM-7188

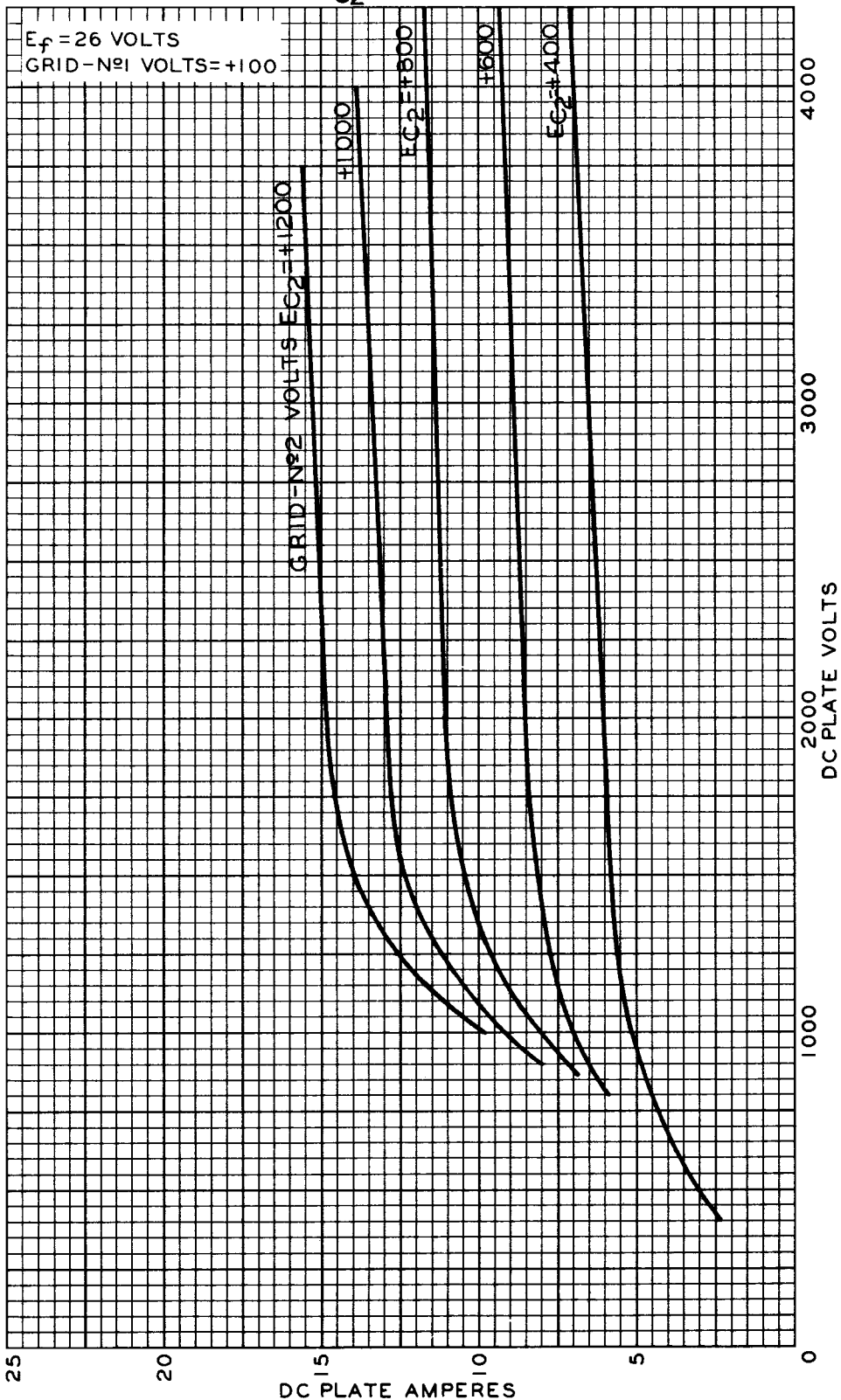
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

715-C



715-C

AVERAGE PLATE CHARACTERISTICS WITH EC_2 AS VARIABLE



FEB.23,1949

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-7190

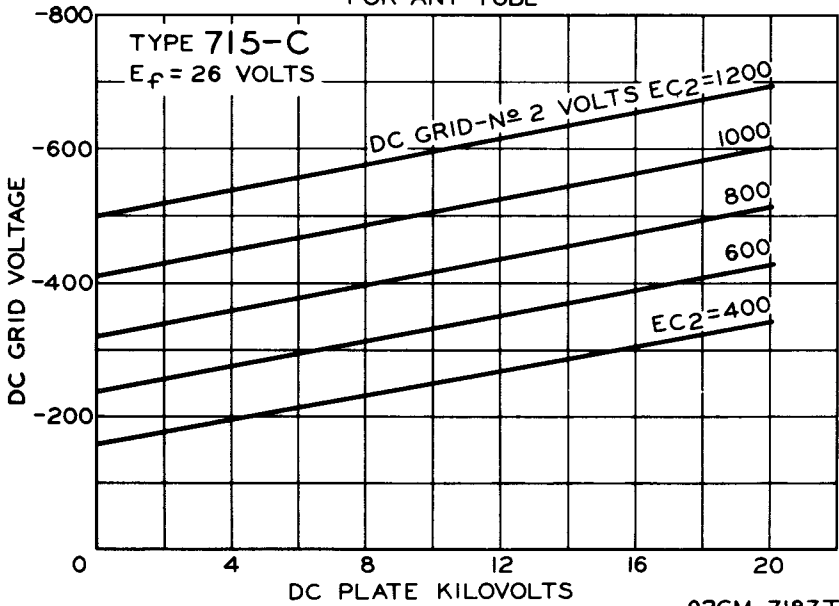


715-C

PULSE AMPLIFIER TETRODE

715-C

MAXIMUM CUTOFF CHARACTERISTICS FOR ANY TUBE



AVERAGE CHARACTERISTICS

