

**MECHANICAL DATA**

Bulb . . . . .	T-5½
Base . . . . .	E7-1, Miniature Button 7-Pin
Outline . . . . .	5-2
Basing . . . . .	7BN
Cathode . . . . .	Coated Unipotential
Mounting Position . . . . .	Any

**ELECTRICAL DATA**

**HEATER CHARACTERISTICS**

Heater Voltage . . . . .	6.3 Volts
Heater Current . . . . .	600 Ma
Heater-Cathode Voltage	
Heater Positive with Respect to Cathode . . . . .	25 Volts Max.
Heater Negative with Respect to Cathode . . . . .	100 Volts Max.

**DIRECT INTERELECTRODE CAPACITANCES**

Grid No. 1 to Plate . . . . .	0.026 $\mu\mu\text{f}$
Grid No. 1 to (k + Shield Grid) . . . . .	2.4 $\mu\mu\text{f}$

**RATINGS (Absolute Values)**

Peak Forward Plate Voltage . . . . .	650 Volts Max.
Peak Inverse Plate Voltage . . . . .	1300 Volts Max.
Cathode Current	
Peak . . . . .	500 Ma Max.
Average . . . . .	100 Ma Max.
Surge (0.1 Sec. Max. Duration) . . . . .	10 Amperes Max.
Averaging Time . . . . .	30 Sec. Max.
Negative Grid No. 1 Voltage (Control Grid)	
Before Conduction . . . . .	100 Volts Max.
During Conduction . . . . .	10 Volts Max.
Positive Grid No. 1 Current	
Plate Positive . . . . .	10 Ma Max.
Plate Negative . . . . .	10 Ma Max.
Negative Grid No. 2 Voltage (Shield Grid)	
Before Conduction . . . . .	100 Volts Max.
During Conduction . . . . .	10 Volts Max.
Positive Grid No. 2 Current (Shield Grid)	
Plate Positive . . . . .	10 Ma Max.
Plate Negative . . . . .	10 Ma Max.
Ambient Temperature Limits . . . . .	-75 to +90° C Max.

**CHARACTERISTICS**

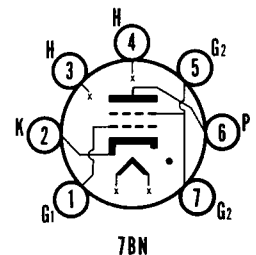
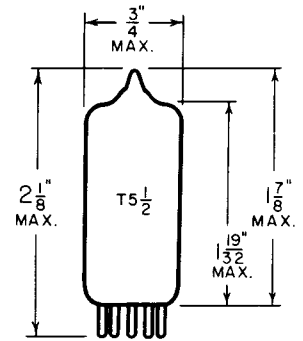
Cathode Heating Time, Min. . . . .	10 Sec.
Deionization Time, Approx. <sup>1</sup>	
$E_{c1} = -100$ Volts DC . . . . .	35 $\mu\text{sec.}$
$E_{c1} = -11$ Volts DC . . . . .	75 $\mu\text{sec.}$
Ionization Time, Approx. . . . .	0.5 $\mu\text{sec.}$
Plate Voltage Drop . . . . .	8 Volts
Critical Grid No. 1 Current, Max.	
$E_{bb} = 460$ Volts RMS . . . . .	0.5 $\mu\text{a}$

**NOTE:**

1.  $E_{bb} = 125$  Volts DC,  $I_b = 100$  Ma DC, and  $R_g = 1000$  Ohms.

**QUICK REFERENCE DATA**

The Sylvania Type 2D21 is a miniature four element thyratron with negative control characteristics designed for use in relay applications. The 2D21 features a high control ratio essentially independent of temperature over a wide range, low grid to plate capacitance and low grid current.



**SYLVANIA ELECTRIC  
PRODUCTS INC.**

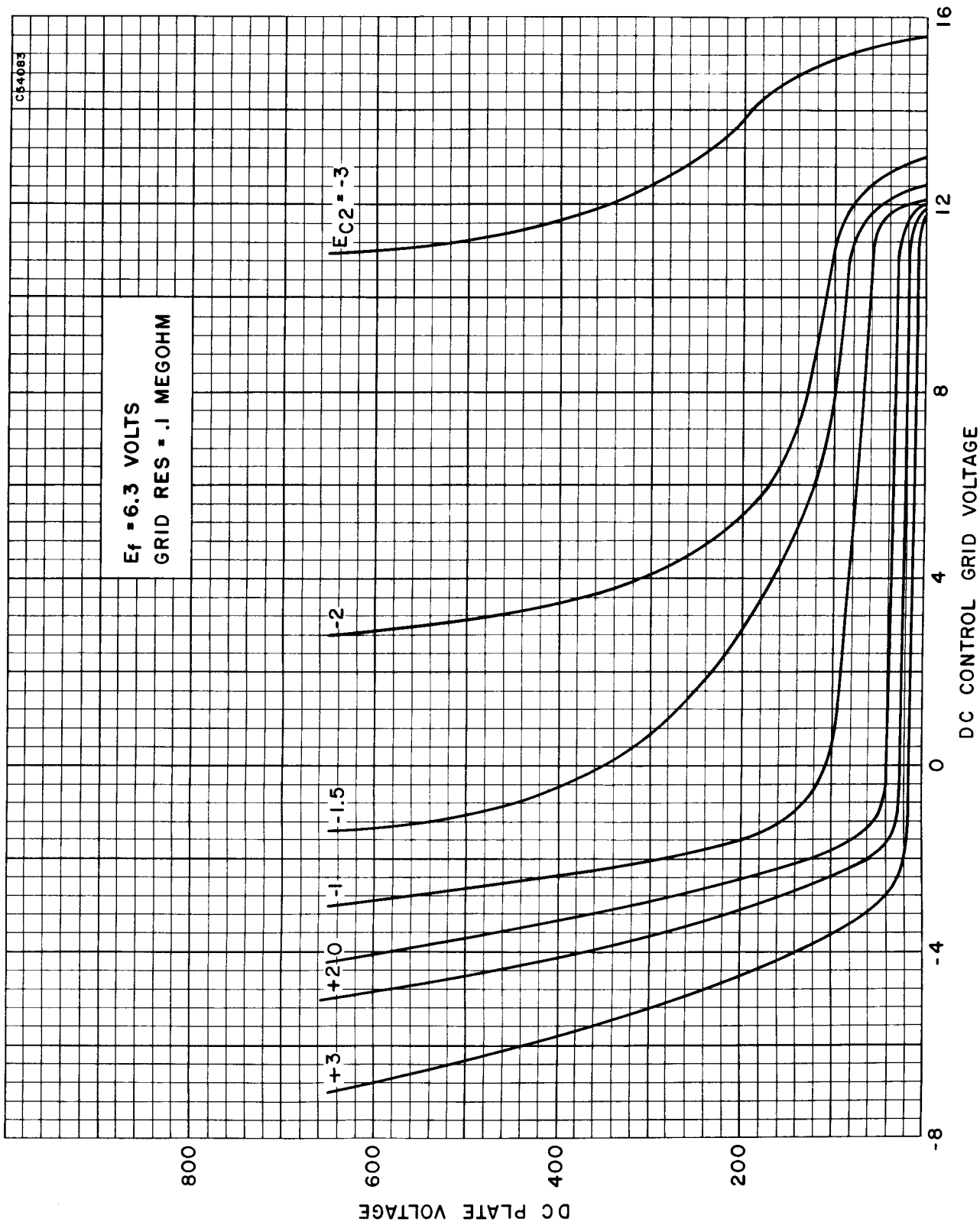
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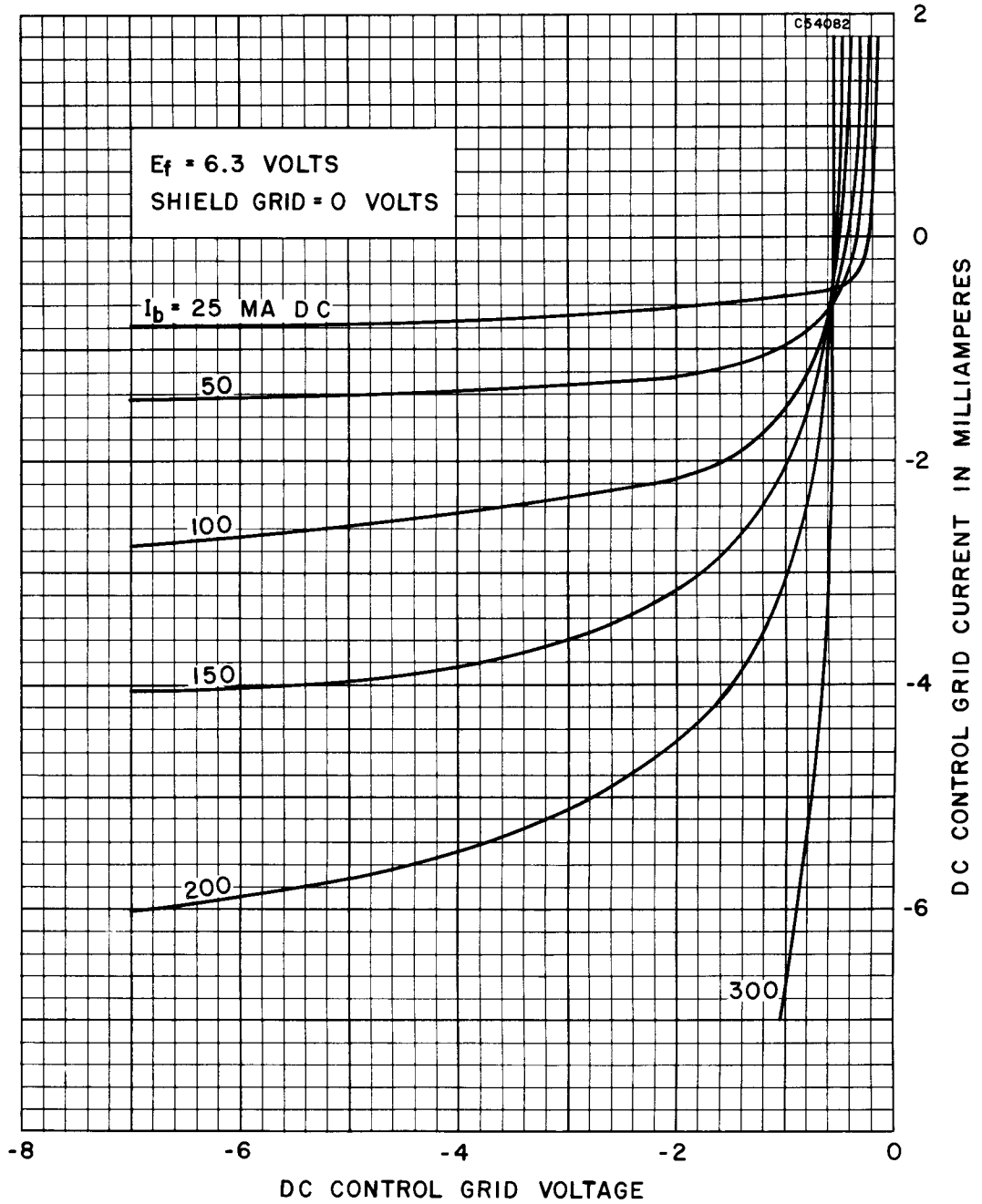
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PAGE 1 OF 5

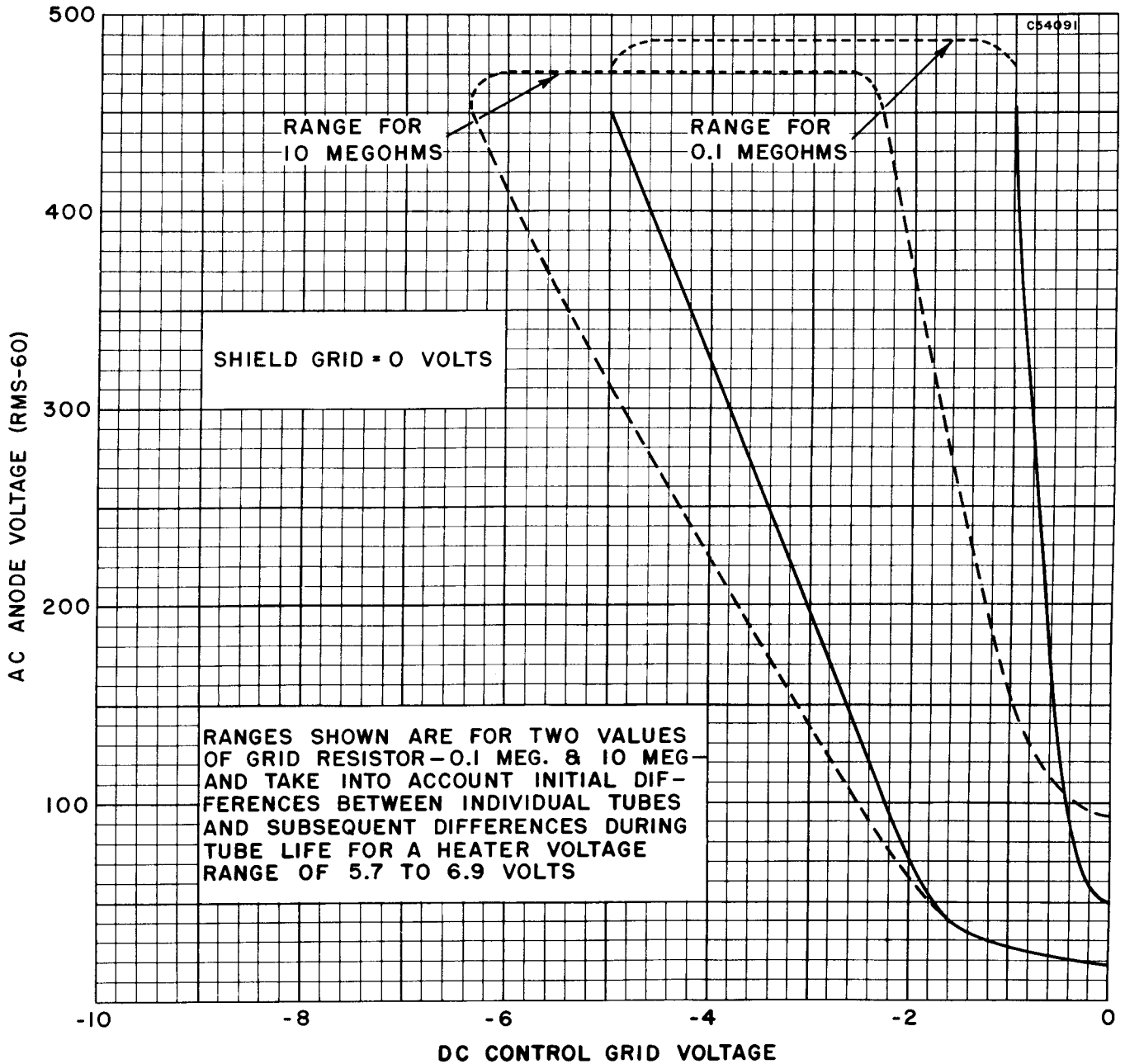
AVERAGE CONTROL CHARACTERISTICS



AVERAGE GRID CHARACTERISTICS  
DURING ANODE CONDUCTION



OPERATIONAL RANGE OF CRITICAL GRID VOLTAGE



AVERAGE GRID CHARACTERISTICS  
BEFORE ANODE CONDUCTION

