

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 μ f
Grid No. 1 to (k + Shield Grid)	2.4 μ 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

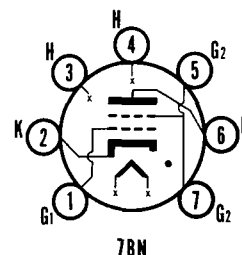
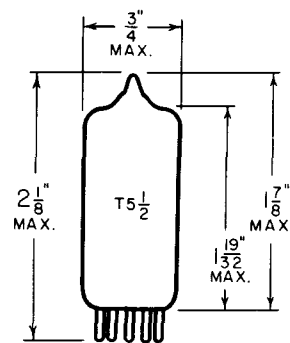
Cathode Heating Time, Min.	10 Sec.
Deionization Time, Approx. ¹	
$E_{c1} = -100$ Volts DC	35 μ sec.
$E_{c1} = -11$ Volts DC	75 μ sec.
Ionization Time, Approx.	0.5 μ sec.
Plate Voltage Drop	8 Volts
Critical Grid No. 1 Current, Max.	
$E_{bb} = 460$ Volts RMS	0.5 μ a

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 thyatron 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.

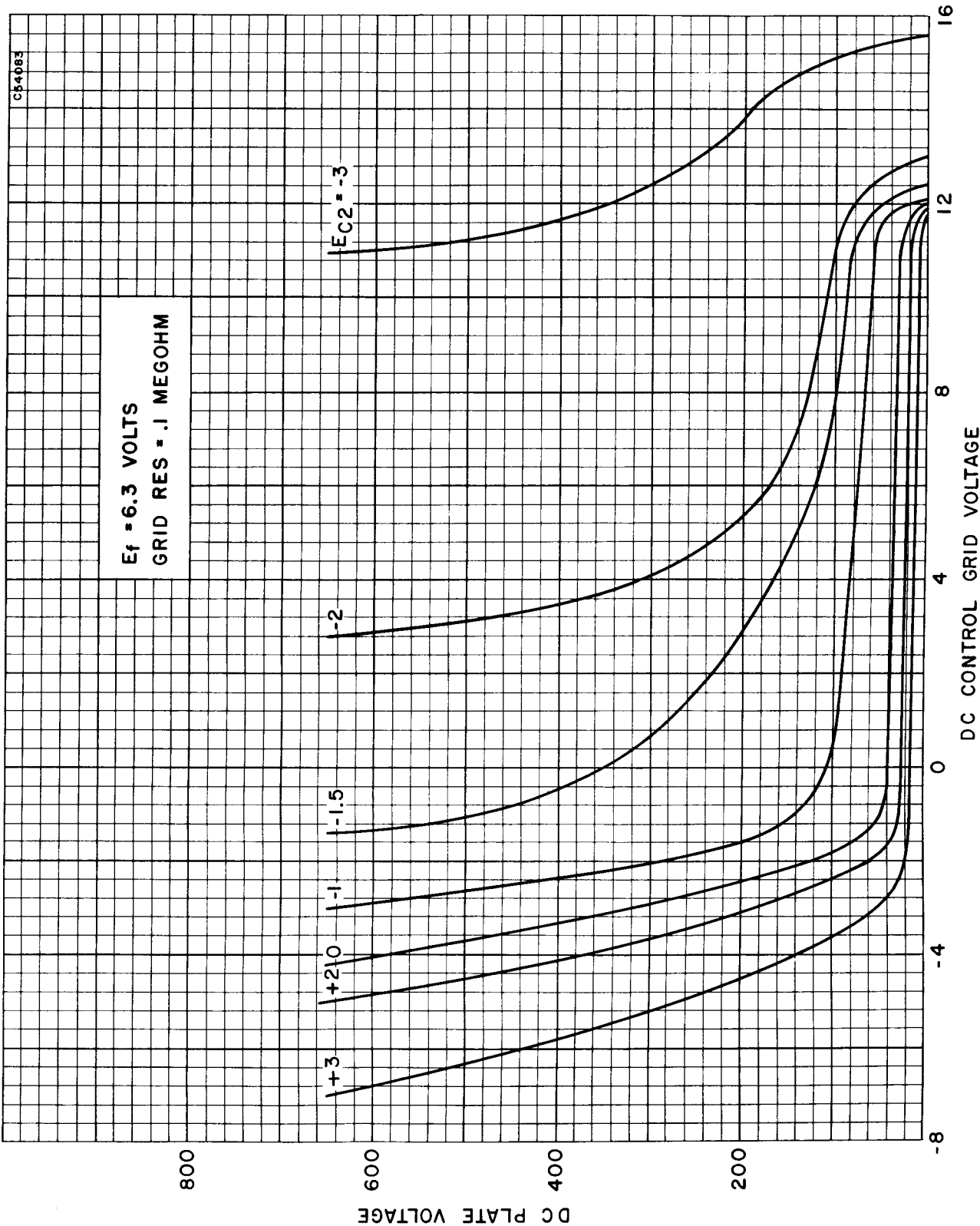
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Prepared and Released By The
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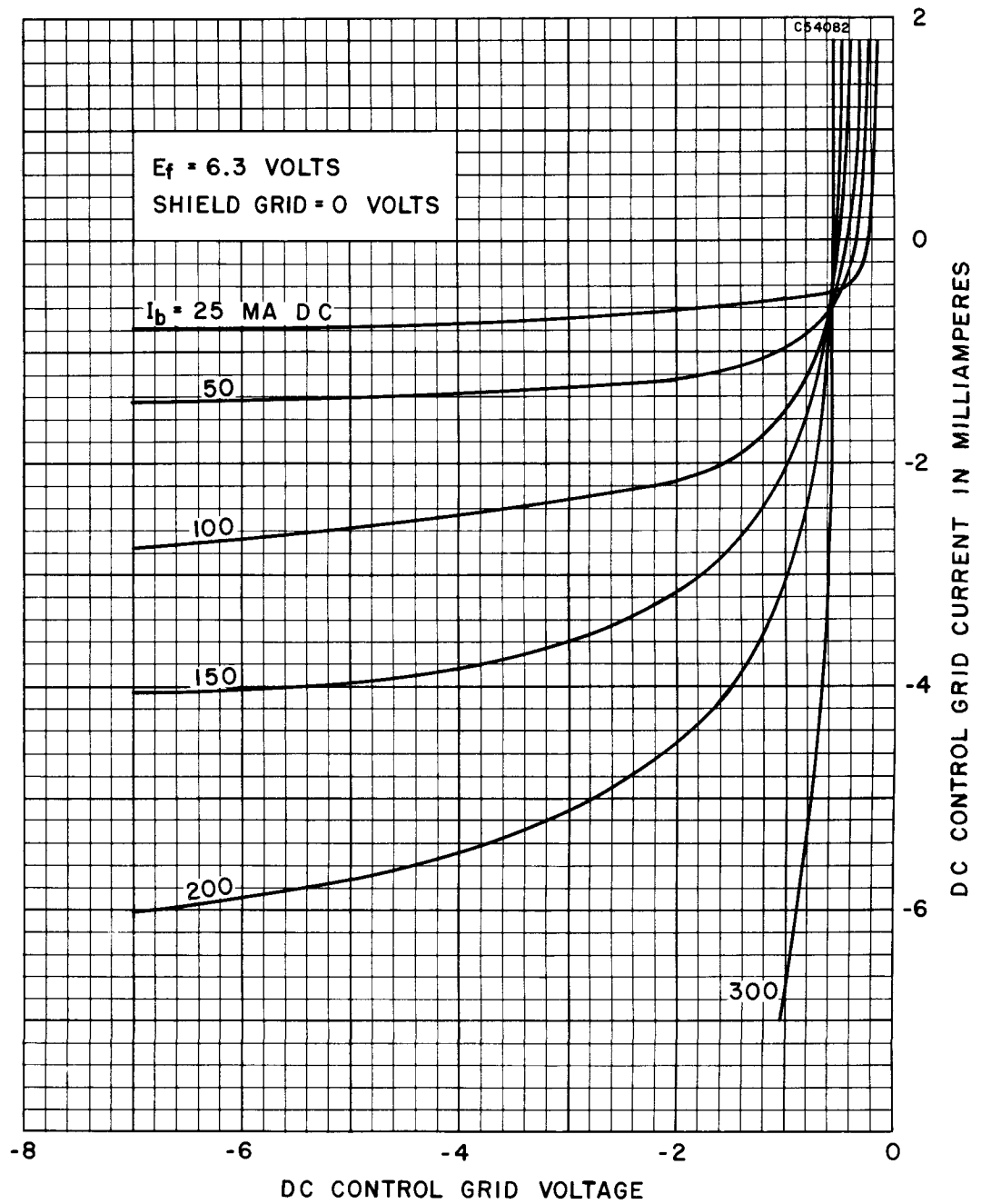
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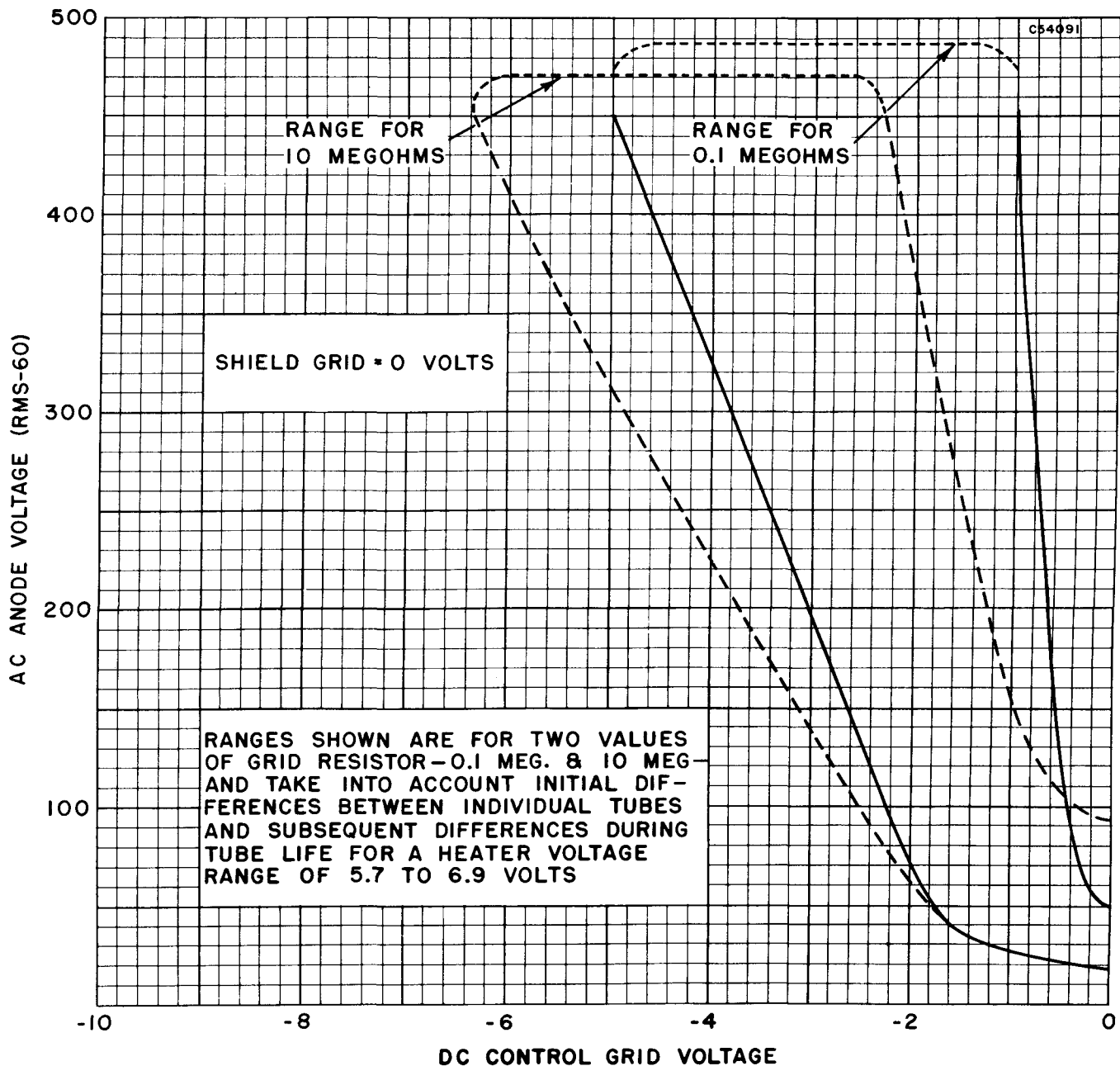
AVERAGE CONTROL CHARACTERISTICS



AVERAGE GRID CHARACTERISTICS
DURING ANODE CONDUCTION



OPERATIONAL RANGE OF CRITICAL GRID VOLTAGE



AVERAGE GRID CHARACTERISTICS
BEFORE ANODE CONDUCTION

