

DESCRIPTION AND RATING

The 7233 is a miniature, low-mu triode designed for service as a series regulator tube in power supplies. It is especially suited for use in compact electronic instruments.

GENERAL

ELECTRICAL

Cathode—Coated Unipotential		
Heater Voltage, AC or DC*	6.3 ± 0.6	Volts
Heater Current†	1.0	Amperes
Direct Interelectrode Capacitances, approximate‡		
Grid to Plate: (g to p)	14	μμf
Input: g to (h+k)	7.5	μμf
Output: p to (h+k)	2.2	μμf

MECHANICAL

Mounting Position—Any
 Envelope—T-6½, Glass
 Base—E9-1, Small Button 9-Pin

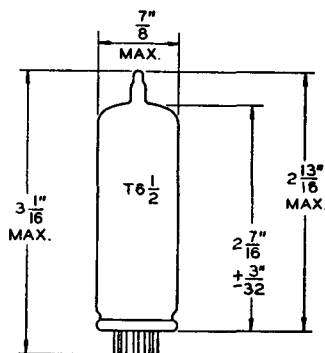
MAXIMUM RATINGS

SERIES-REGULATOR SERVICE—ABSOLUTE-MAXIMUM VALUES

Plate Voltage	330	Volts
Positive DC Grid Voltage	0	Volts
Negative DC Grid Voltage	135	Volts
Plate Dissipation	8.0	Watts
DC Cathode Current	150	Milliamperes
Heater-Cathode Voltage		
Heater Positive with Respect to Cathode	300	Volts

Heater Negative with Respect to Cathode		
	300	Volts
Grid-Circuit Resistance		
With Fixed Bias§	0.1	Megohms
With Cathode Bias	1.0	Megohms
Cathode Resistor, minimum	See Rating Chart, Page 2	
Bulb Temperature at Hottest Point	200	C

PHYSICAL DIMENSIONS

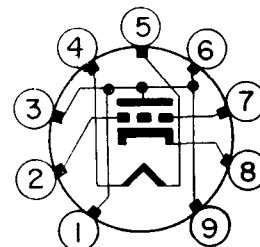


EIA 6-4

TERMINAL CONNECTIONS

- Pin 1—Plate
- Pin 2—Grid
- Pin 3—Plate
- Pin 4—Heater
- Pin 5—Heater
- Pin 6—Plate
- Pin 7—Grid
- Pin 8—Cathode
- Pin 9—Plate

BASING DIAGRAM



EIA 9FR

CHARACTERISTICS AND TYPICAL OPERATION

AVERAGE CHARACTERISTICS

Plate Supply Voltage.....	50	
Plate Voltage.....	125	Volts
Cathode-Bias Resistor.....	22	Ohms
Amplification Factor.....	4.0	
Plate Resistance, approximate.....	230	Ohms
Transconductance.....	17500	Micromhos
Plate Current.....	120	Milliamperes
Grid Voltage, approximate		
I _b = 1.0 Milliamperes.....	-60	Volts

* The equipment designer should design the equipment so that heater voltage is centered at the specified bogey value, with heater supply variations restricted to maintain heater voltage within the specified tolerance.

† Heater current of a bogey tube at $E_f = 6.3$ volts.

‡ Without external shield.

§ The use of fixed bias is not recommended when two or more tubes are used in parallel.

Absolute-Maximum ratings are limiting values of operating and environmental conditions applicable to any electron tube of a specified type as defined by its published data and should not be exceeded under the worst probable conditions.

The tube manufacturer chooses these values to provide acceptable serviceability of the tube, making no allowance for equipment variations, environmental variations, and the effects of changes in operating conditions due to variations in the characteristics of the tube under consideration and of

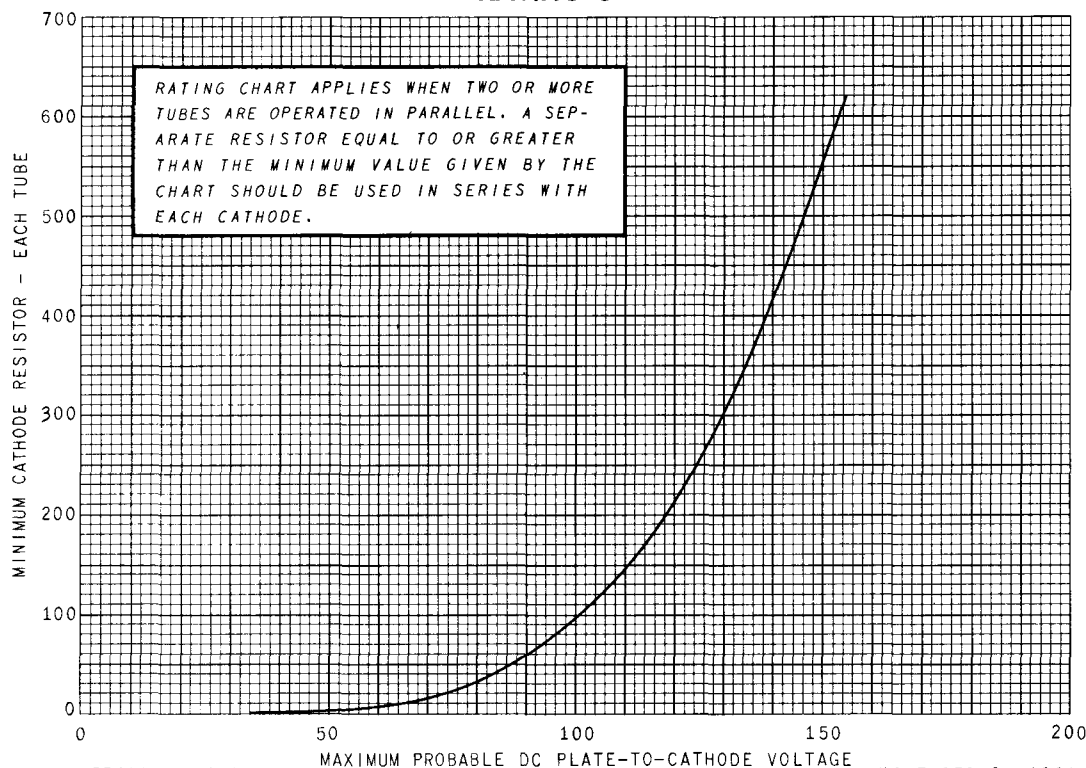
all other electron devices in the equipment.

The equipment manufacturer should design so that initially and throughout life no absolute-maximum value for the intended service is exceeded with any tube under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, signal variation, environmental conditions, and variations in the characteristics of the tube under consideration and of all other electron devices in the equipment.

The tubes and arrangements disclosed herein may be covered by patents of General Electric Company or others. Neither the disclosure of any information herein nor the sale of tubes by General Electric Company conveys any license under patent claims covering combinations of tubes with other devices or

elements. In the absence of an express written agreement to the contrary, General Electric Company assumes no liability for patent infringement arising out of any use of the tubes with other devices or elements by any purchaser of tubes or others.

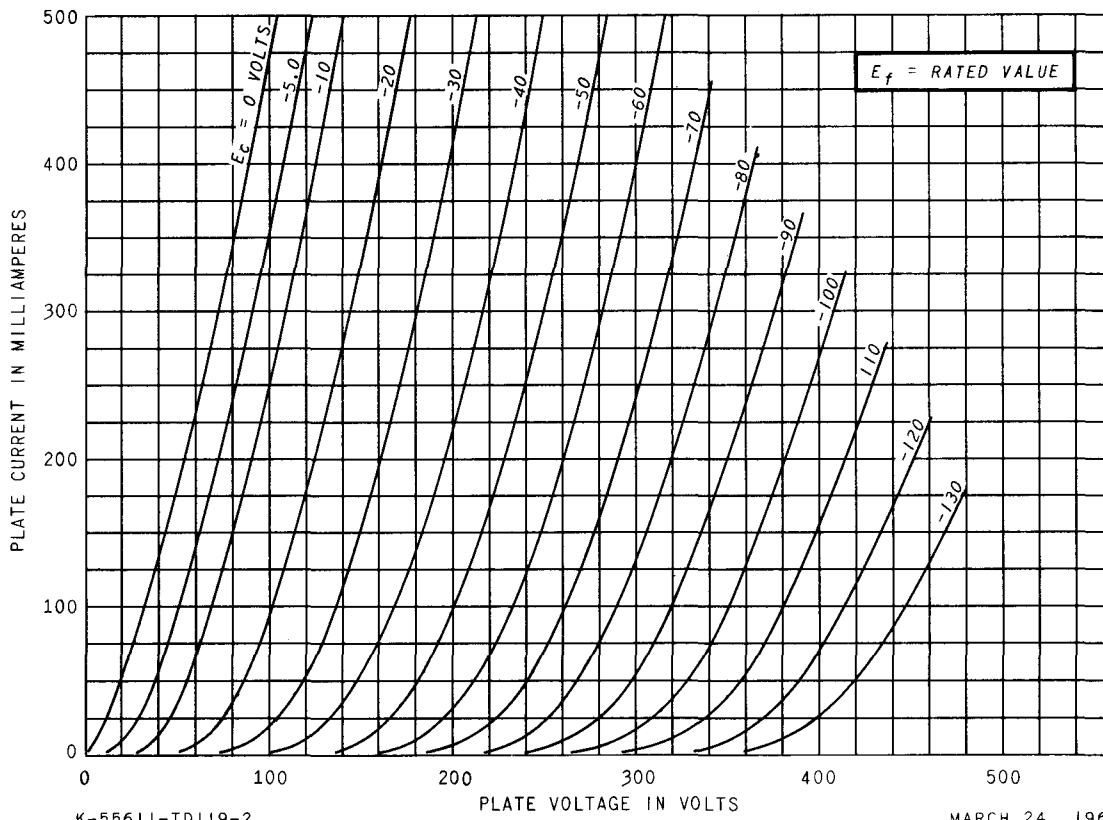
RATING CHART



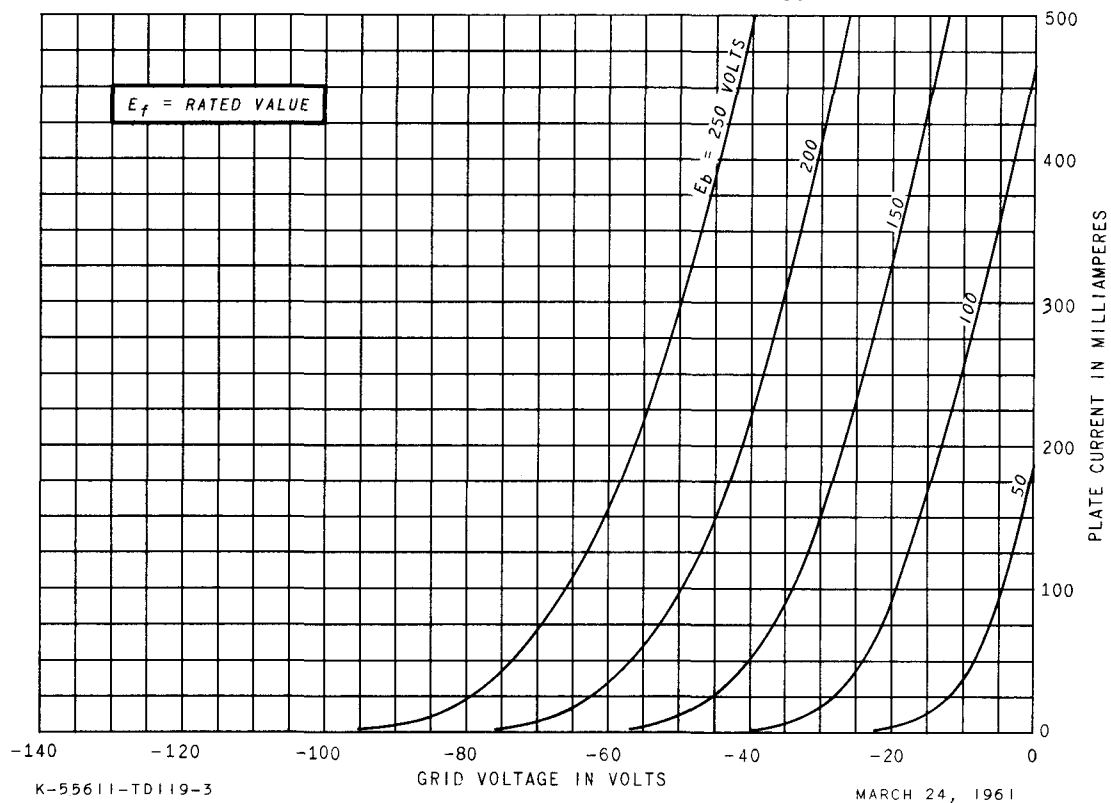
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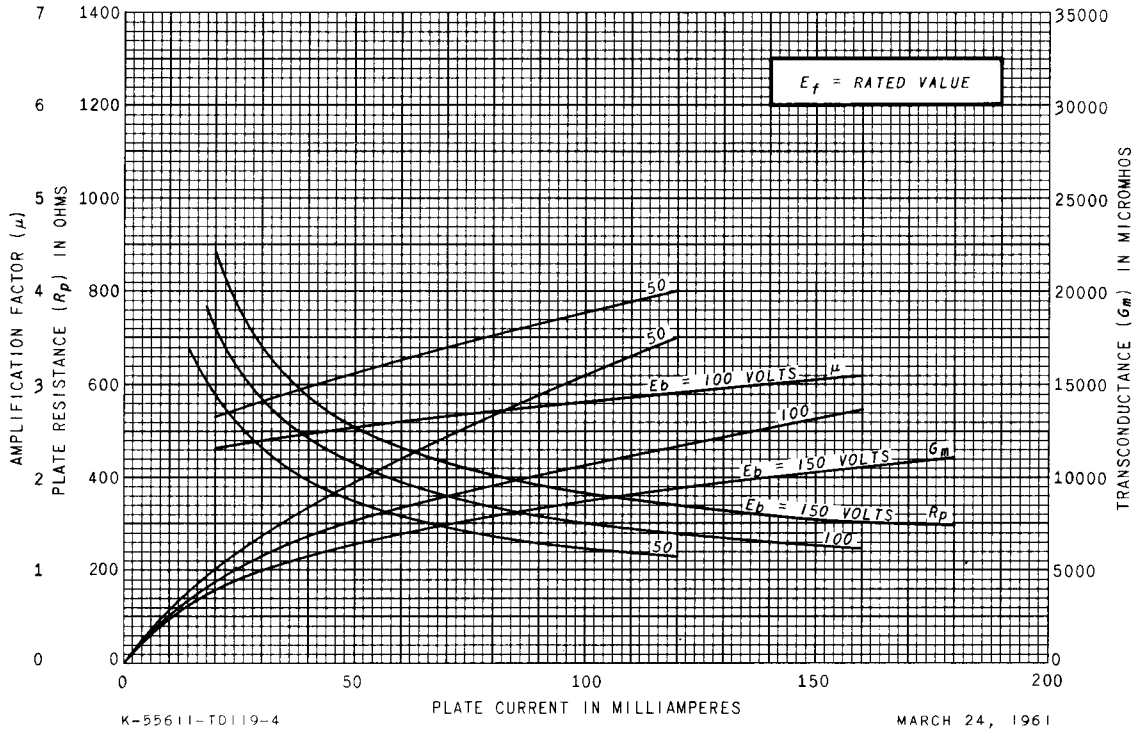
AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE CHARACTERISTICS



RECEIVING TUBE DEPARTMENT

GENERAL  **ELECTRIC**

Owensboro, Kentucky