



ELECTRONICS

6JZ8

COMPACTRON TRIODE-PENTODE

FOR TV VERTICAL-DEFLECTION OSCILLATOR AND AMPLIFIER APPLICATIONS

DESCRIPTION AND RATING

The 6JZ8 is a compactron containing a medium-mu triode and a beam pentode. The triode is designed for service as a vertical-deflection oscillator and the pentode as a vertical-deflection amplifier in television receivers.

GENERAL

ELECTRICAL

Cathode - Coated Unipotential

Heater Characteristics and Ratings

Heater Voltage, AC or DC* 6.3±0.6 Volts

Heater Current‡ 1.2 Amperes

Direct Interelectrode Capacitances§

Pentode Section

Grid-Number 1 to Plate:

(P_{g1} to P_p). 0.34 pf

Input: P_{g1} to (h + P_k + P_{g2} + b.p.). 11 pf

Output: P_p to (h + P_k + P_{g2} + b.p.). 7.0 pf

Triode Section

Grid to Plate: (T_g to T_p) 3.6 pf

Input: T_g to (h + T_k) 2.2 pf

Output: T_p to (h + T_k) 0.7 pf

MECHANICAL

Operating Position - Any

Envelope - T-9, Glass

Base - E12-70, Button 12-Pin

Outline Drawing - EIA 9-58

Maximum Diameter 1.188 Inches

Maximum Over-all Length. 2.375 Inches

Maximum Seated Height 2.000 Inches

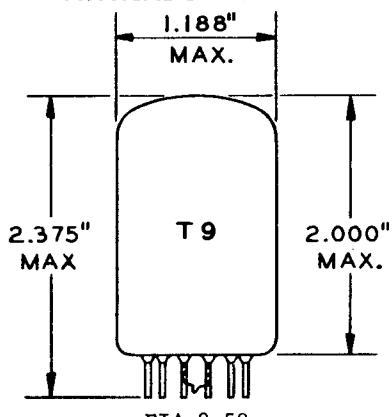
MAXIMUM RATINGS

Design-Maximum ratings are limiting values of operating and environmental conditions applicable to a bogey 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 allowance for the effects of changes in operating conditions due to variations in the characteristics of the tube under consideration.

The equipment manufacturer should design so that initially and throughout life no design-maximum value for the intended service is exceeded with a bogey 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 all other electron devices in the equipment.

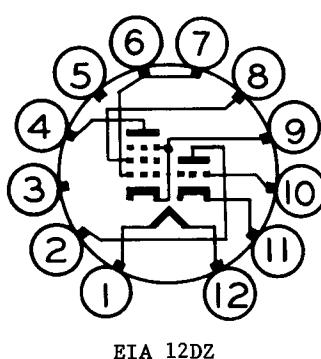
PHYSICAL DIMENSIONS



TERMINAL CONNECTIONS

- Pin 1 - Heater
- Pin 2 - Triode Plate
- Pin 3 - No Connection
- Pin 4 - Pentode Plate
- Pin 5 - No Connection
- Pin 6 - Pentode Grid Number 1
- Pin 7 - Pentode Grid Number 1
- Pin 8 - Pentode Grid Number 2 (Screen)
- Pin 9 - Pentode Cathode and Beam Plates
- Pin 10 - Triode Grid
- Pin 11 - Triode Cathode
- Pin 12 - Heater

BASING DIAGRAM



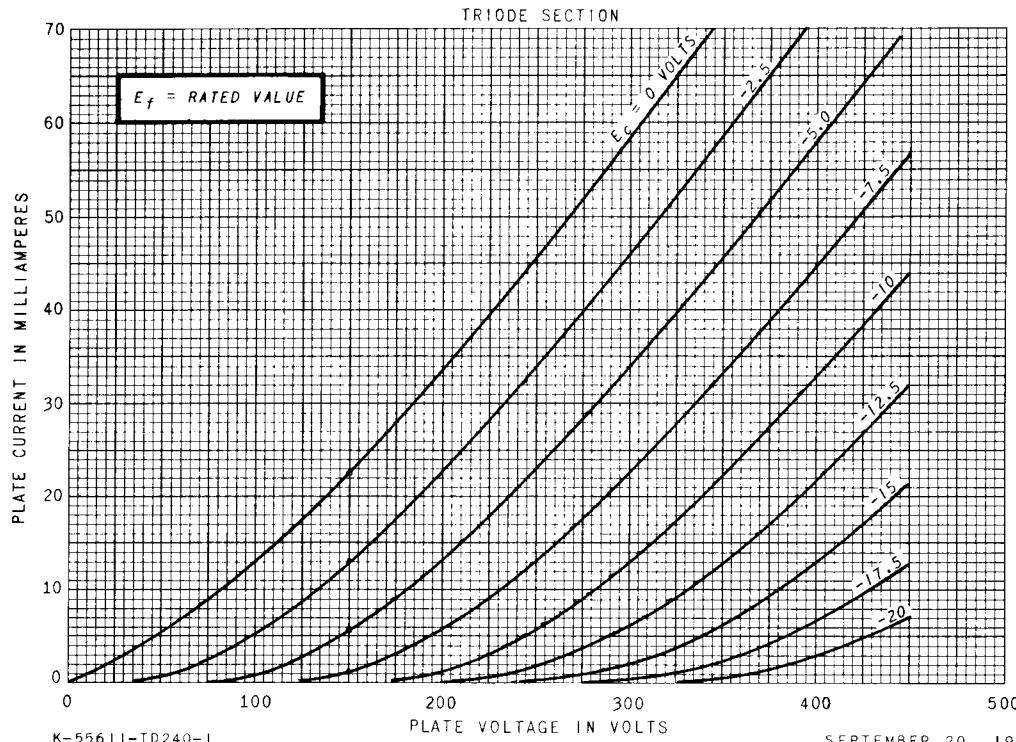
NOTES

- * 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.
- ¶ For operation in a 525-line, 30-frame television system as described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission. The duty cycle of the voltage pulse must not exceed 15 percent of one scanning cycle.
- # In stages operating with grid-leak bias, an adequate cathode-bias resistor or other suitable means is required to protect the tube in the absence of excitation.
- Δ Applied for short interval (two seconds maximum) so as not to damage tube.

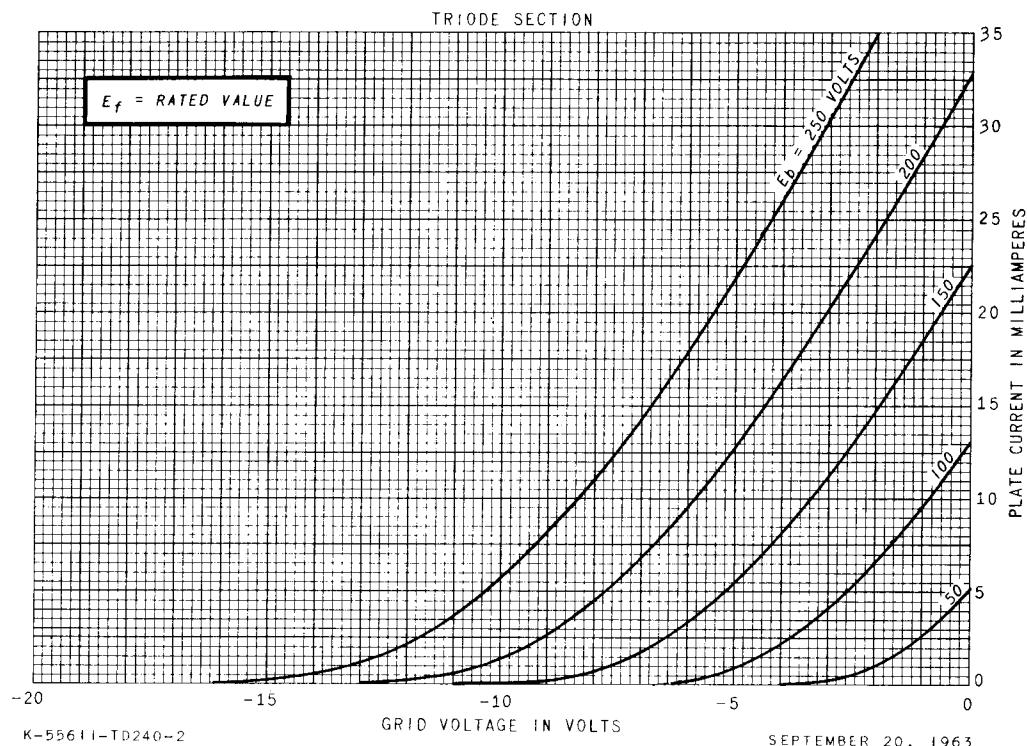
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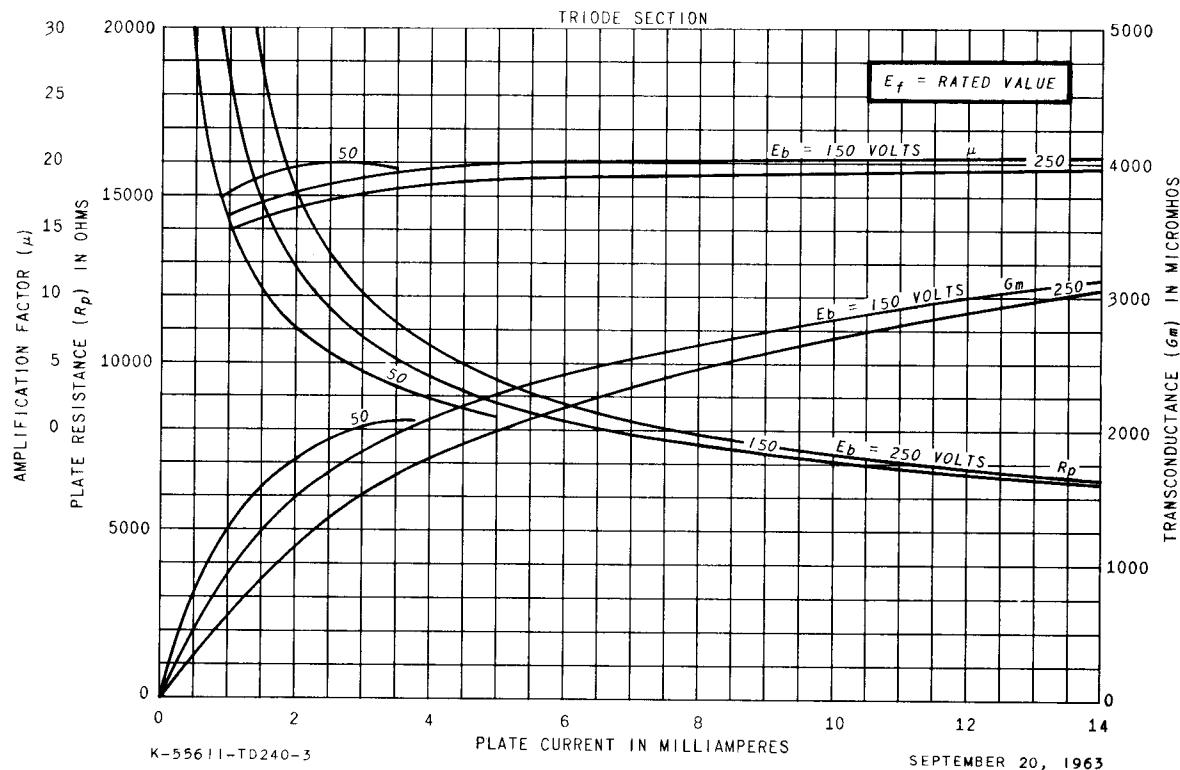
AVERAGE PLATE CHARACTERISTICS



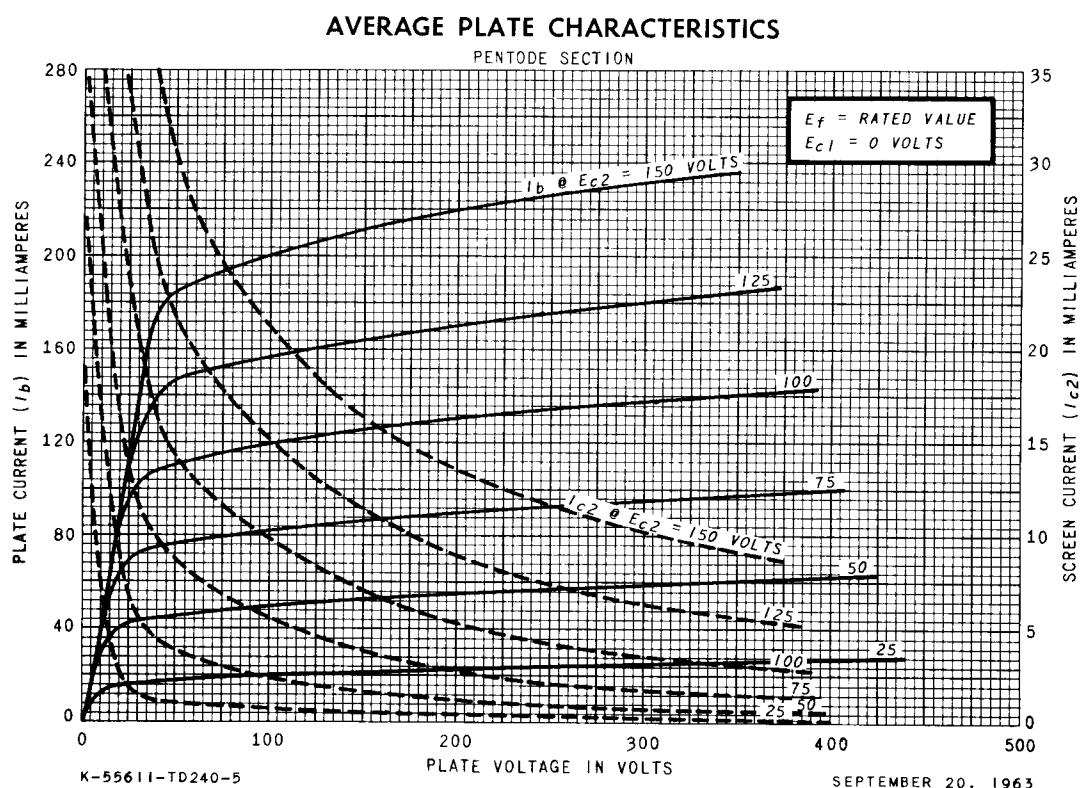
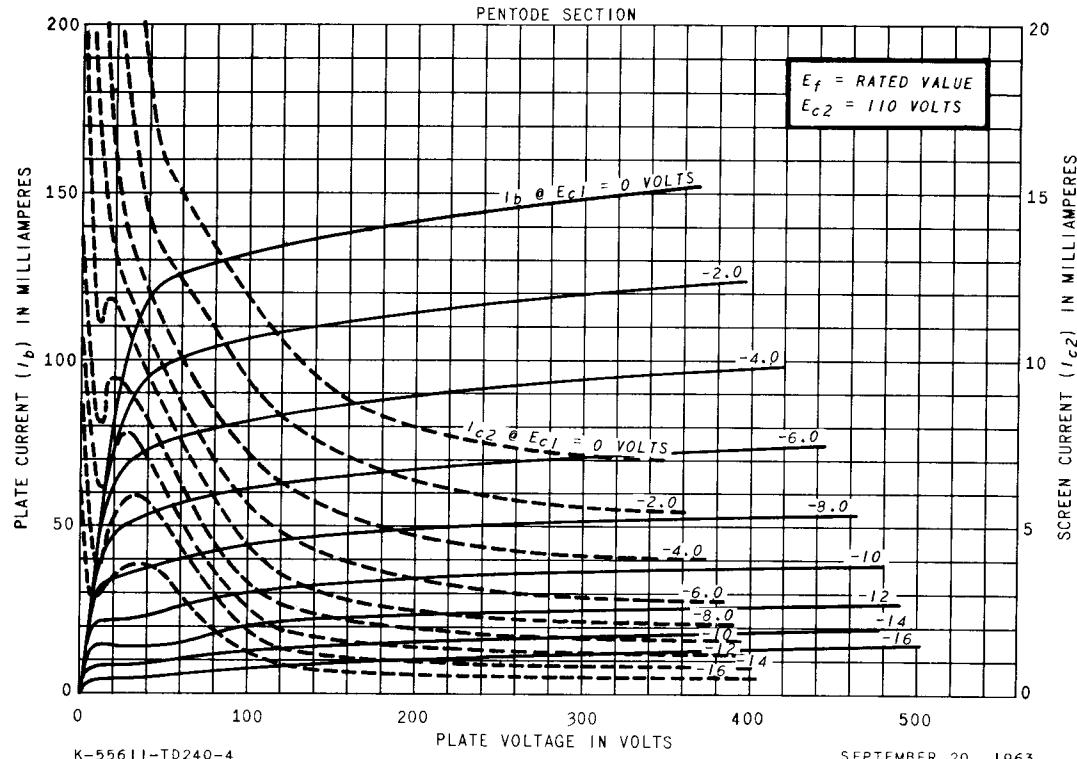
AVERAGE TRANSFER CHARACTERISTICS



AVERAGE CHARACTERISTICS

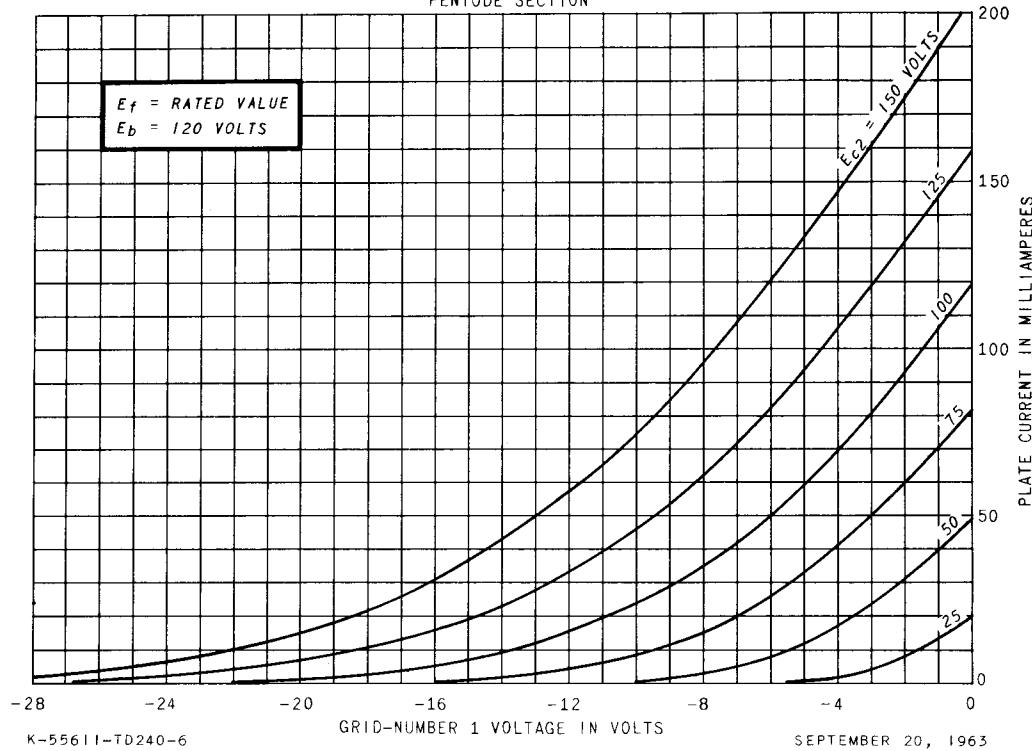


AVERAGE PLATE CHARACTERISTICS



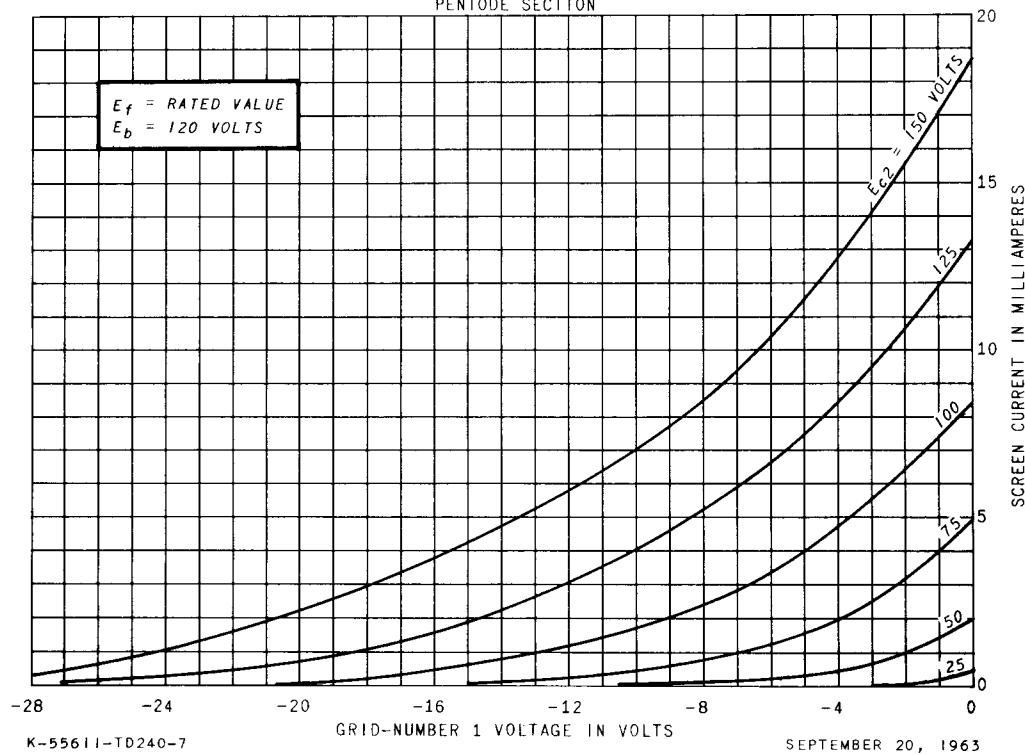
AVERAGE TRANSFER CHARACTERISTICS

PENTODE SECTION



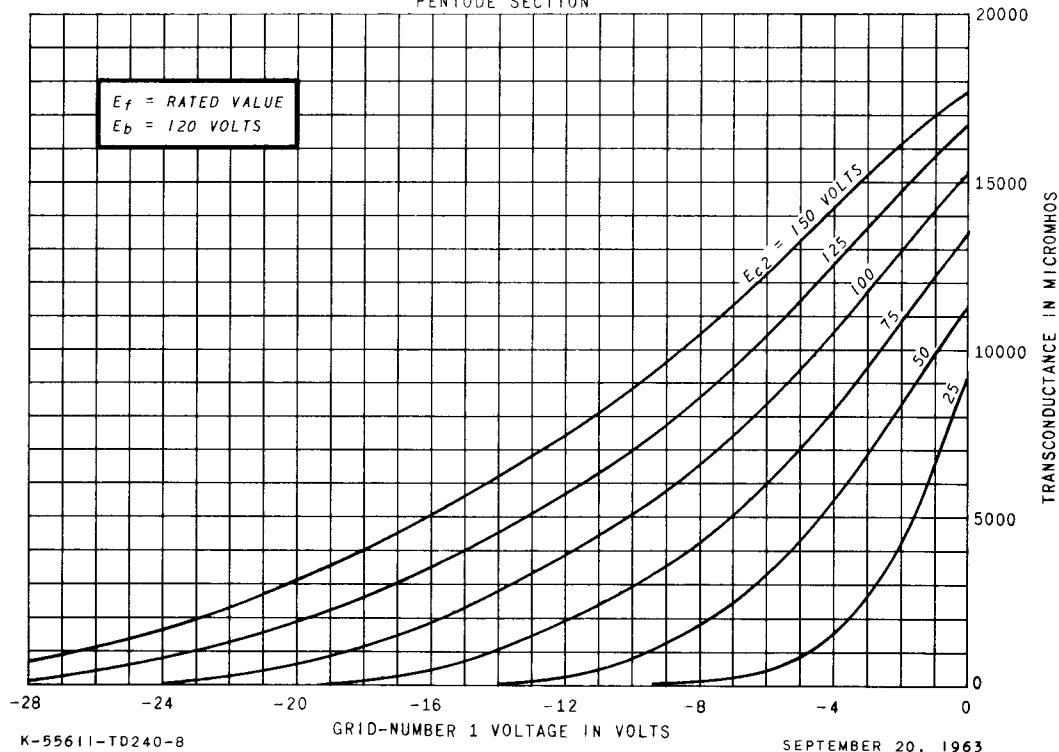
AVERAGE TRANSFER CHARACTERISTICS

PENTODE SECTION



AVERAGE TRANSFER CHARACTERISTICS

PENTODE SECTION



6JZ8

Page 8

12-63

TUBE DEPARTMENT

GENERAL  ELECTRIC

Owensboro, Kentucky