

6DK6

PENTODE

DESCRIPTION AND RATING

The 6DK6 is a miniature sharp-cutoff pentode designed for use as a wide-band radio-frequency or intermediate-frequency amplifier in television receivers. Features of the tube include high transconductance and low inter-electrode capacitances.

GENERAL

ELECTRICAL

Cathode—Coated Unipotential		
Heater Voltage, AC or DC	6.3	Volts
Heater Current	0.3	Amperes
Direct Interelectrode Capacitances*		
Grid-No. 1 to Plate	0.020	$\mu\mu\text{f}$
Input	6.3	$\mu\mu\text{f}$
Output	1.9	$\mu\mu\text{f}$

MECHANICAL

Mounting Position—Any
Envelope—T-5½, Glass
Base—E7-1, Miniature Button 7-Pin

MAXIMUM RATINGS

DESIGN-CENTER VALUES

Plate Voltage	300	Volts
Screen Voltage	150	Volts
Plate Dissipation	2.0	Watts
Screen Dissipation	0.5	Watts
Heater-Cathode Voltage		
Heater Positive with Respect to Cathode		
DC Component	100	Volts
Total DC and Peak	200	Volts
Heater Negative with Respect to Cathode		
Total DC and Peak	300	Volts

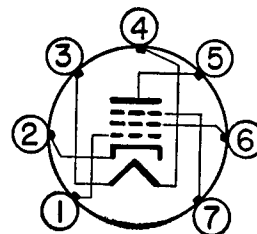
CHARACTERISTICS AND TYPICAL OPERATION

CLASS A₁ AMPLIFIER

Plate Voltage	125	Volts
Suppressor, Connected to Cathode at Socket		
Screen Voltage	125	Volts
Cathode-Bias Resistor	56	Ohms
Transconductance	9800	Micromhos
Plate Current	12	Milliamperes
Screen Current	3.8	Milliamperes
Grid-Number 1 Voltage, approximate		
I _b = 20 Microamperes	—6.5	Volts

* Without external shield.

BASING DIAGRAM

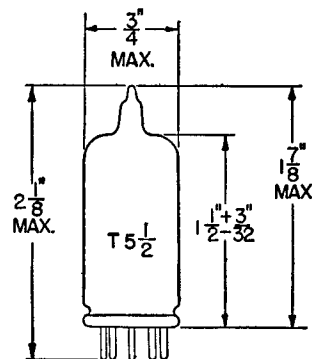


EIA 7CM

TERMINAL CONNECTIONS

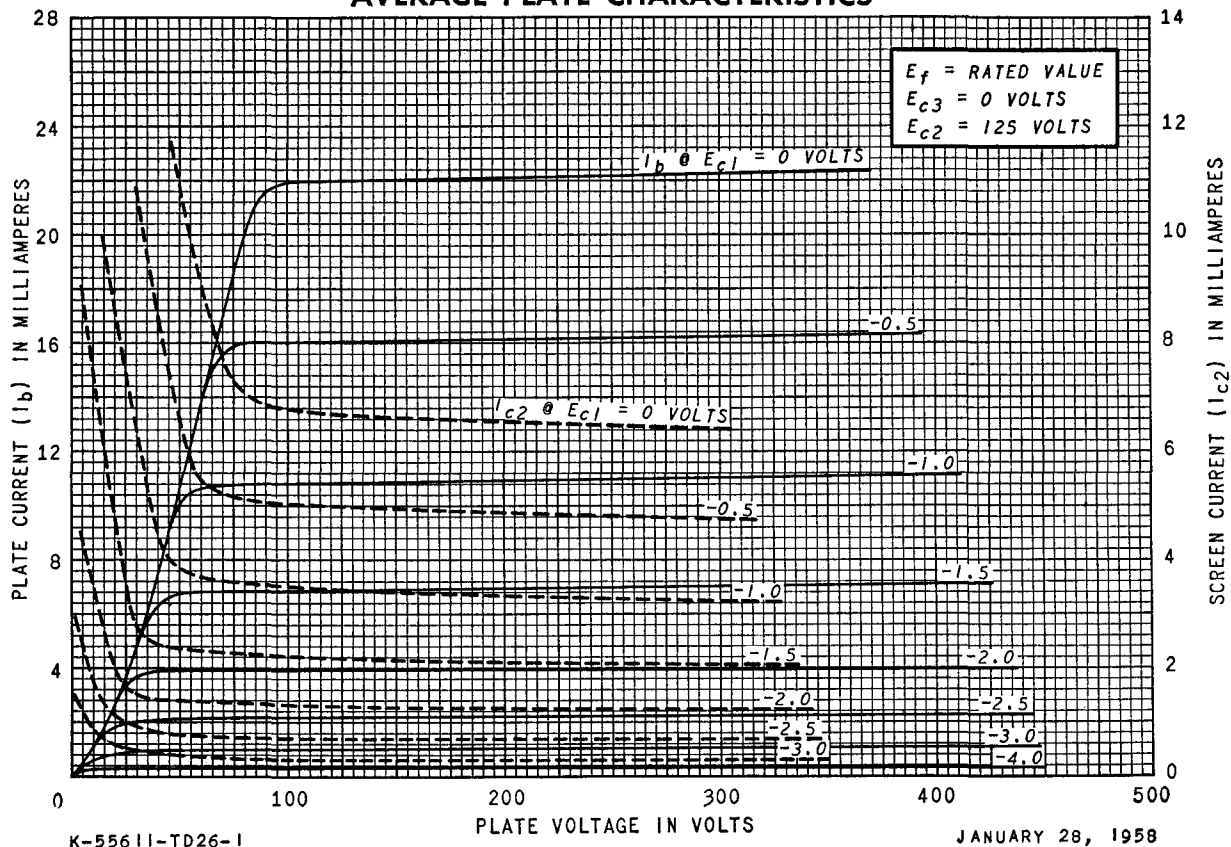
- Pin 1—Grid Number 1
- Pin 2—Cathode
- Pin 3—Heater
- Pin 4—Heater
- Pin 5—Plate
- Pin 6—Grid Number 2 (Screen)
- Pin 7—Internal Shield and Grid-Number 3 (Suppressor)

PHYSICAL DIMENSIONS

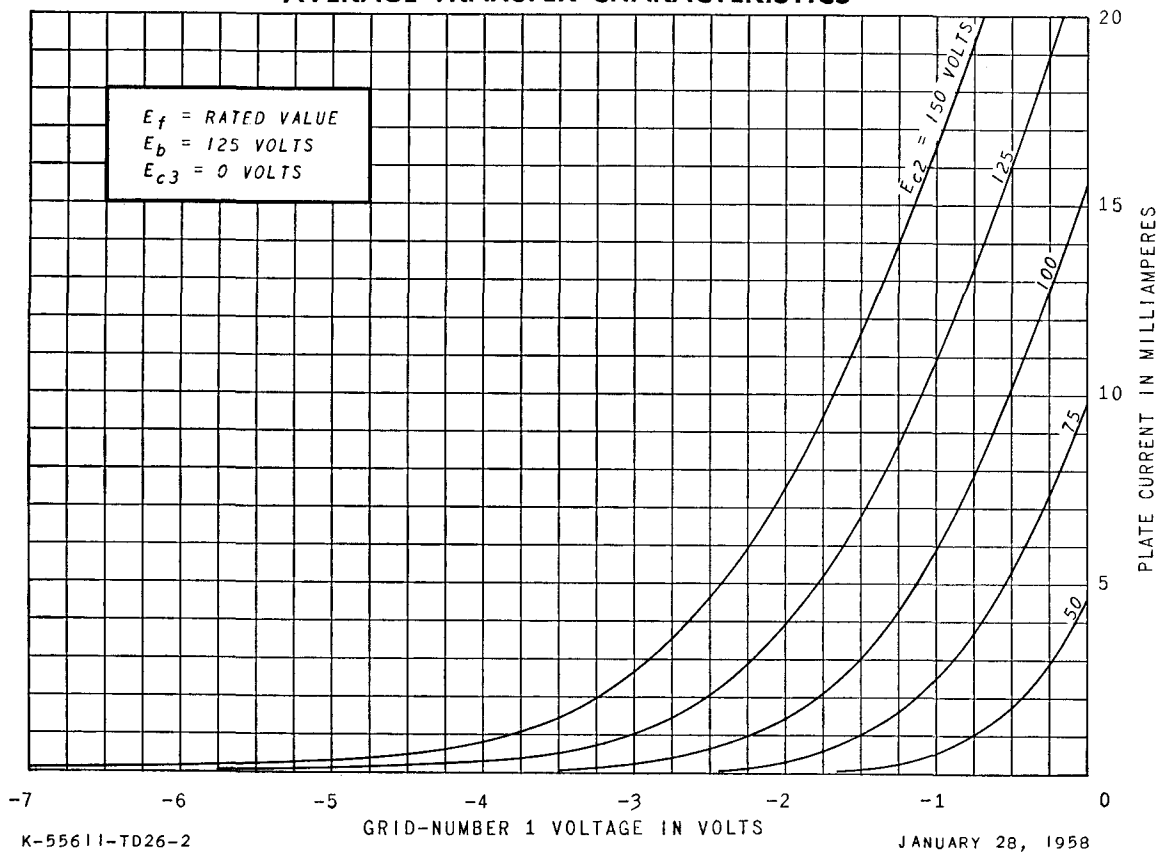


EIA 5-2

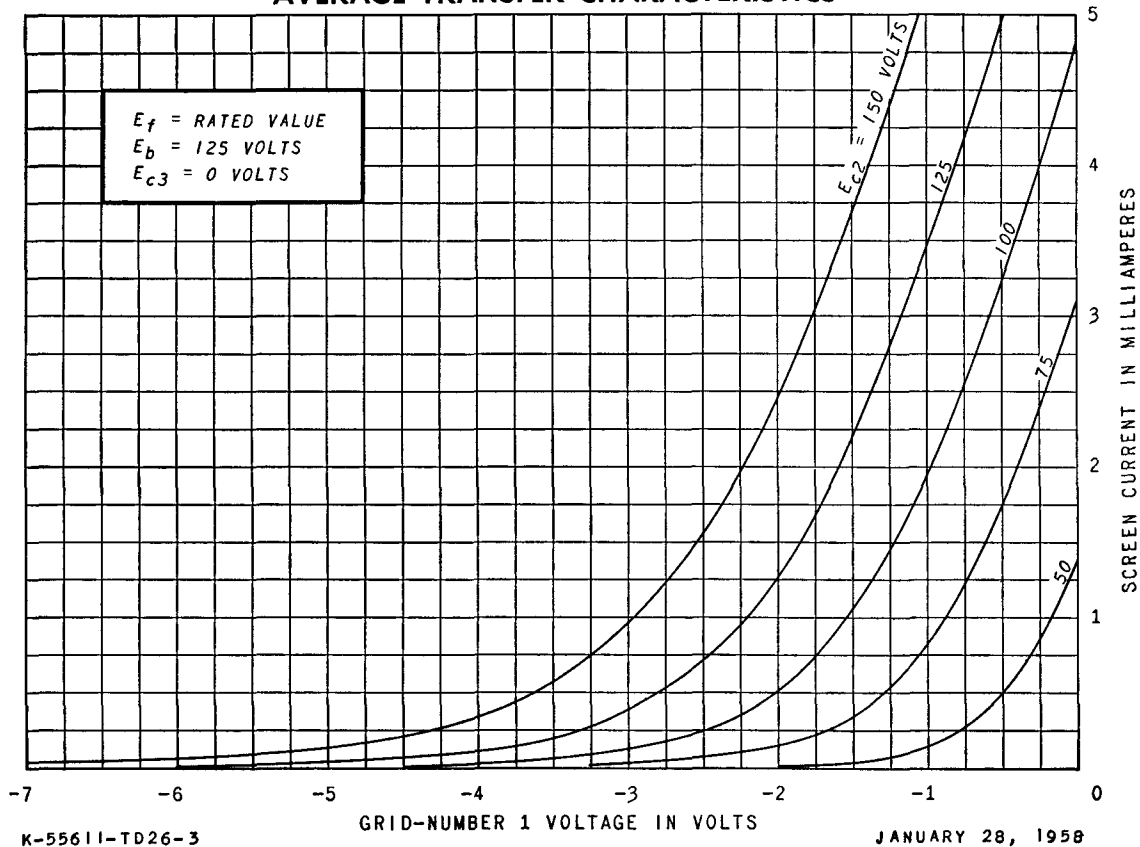
AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS

