Electronic TUBES

6BJ6

PENTODE

DESCRIPTION AND RATING

The 6BJ6 is a miniature, remote-cutoff pentode designed primarily for use as a high-gain radio-frequency or intermediate-frequency amplifier. Features include low grid-plate capacitance, relatively high transconductance, and low heater current.

GENERAL

ELECTRICAL

Cathode—Coated Unipotential			
Heater Voltage, AC or DC	6.3		Volts
Heater Current	0.15		Amperes
Direct Interelectrode Capacitances	**With Shield***	**Without Shield**	
Grid-Number 1 to Plate, maximum	0.0035	0.0035	μμf
Input	4.5	4.5	μμf
Output	5.5	5.5	μμf

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-Supply Voltage	300	Volts
Screen Voltage—See Screen Rating Chart		
Positive DC Grid-Number 1 Voltage	0	Volts
Negative DC Grid-Number 1 Voltage	50	Volts
Plate Dissipation	3.0	Watts
Screen Dissipation	0.6	Watts
Heater-Cathode Voltage		
Heater Positive with Respect to Cathode	90	Volts
Heater Negative with Respect to Cathode	90	Volts

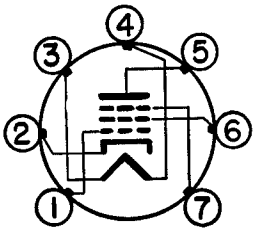
CHARACTERISTICS AND TYPICAL OPERATION

CLASS A_1 AMPLIFIER

Plate Voltage	100	250	Volts
Suppressor, Connected to Cathode at Socket			
Screen Voltage	100	100	Volts
Grid-Number 1 Voltage	−1.0	−1.0	Volts
Plate Resistance, approximate	0.25	1.3	Megohms
Transconductance	3650	3600	Micromhos
Plate Current	9.0	9.2	Milliamperes
Screen Current	3.5	3.3	Milliamperes
Grid-Number 1 Voltage, approximate Gm = 10 Micromhos	−20	−20	Volts

* With external shield (RETMA 316) connected to pin 7.

BASING DIAGRAM

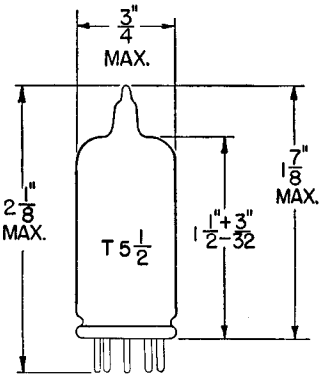


RETMA 7CM

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

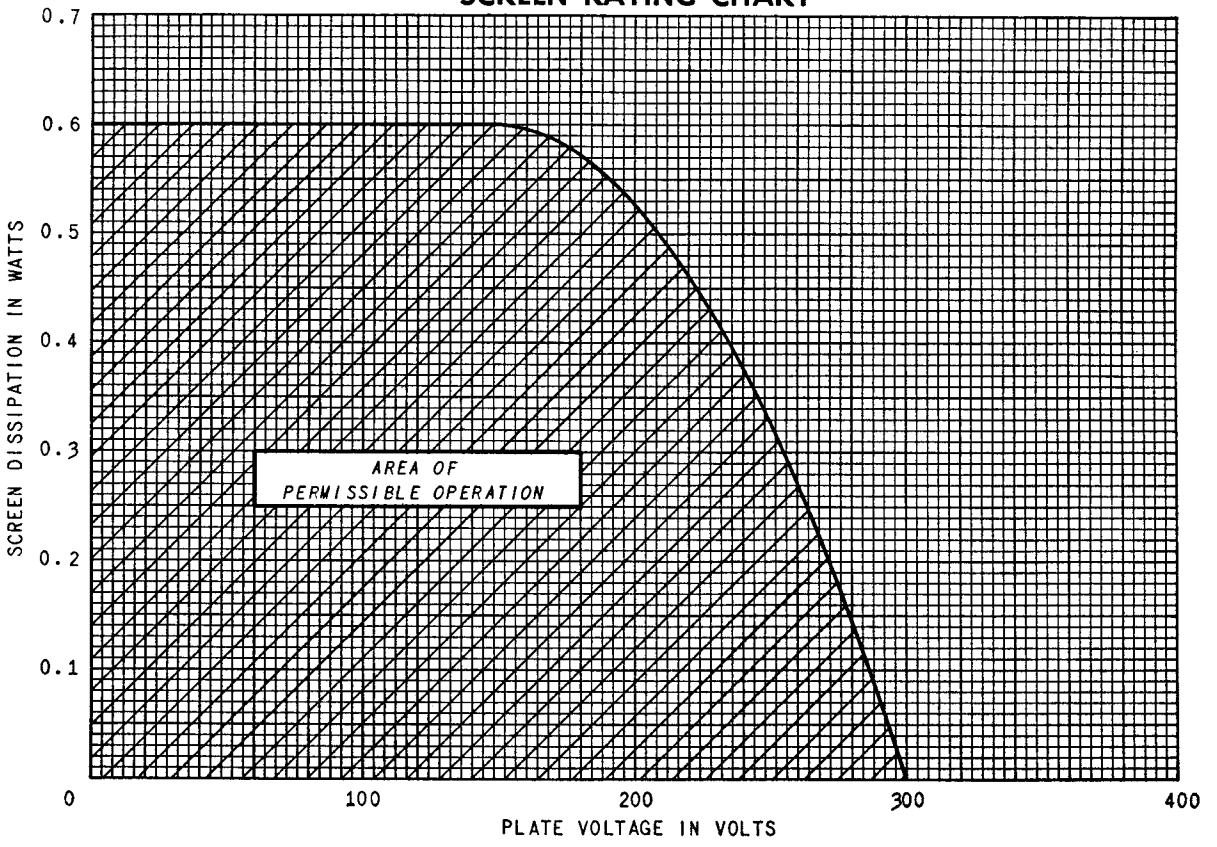


RETMA 5-2

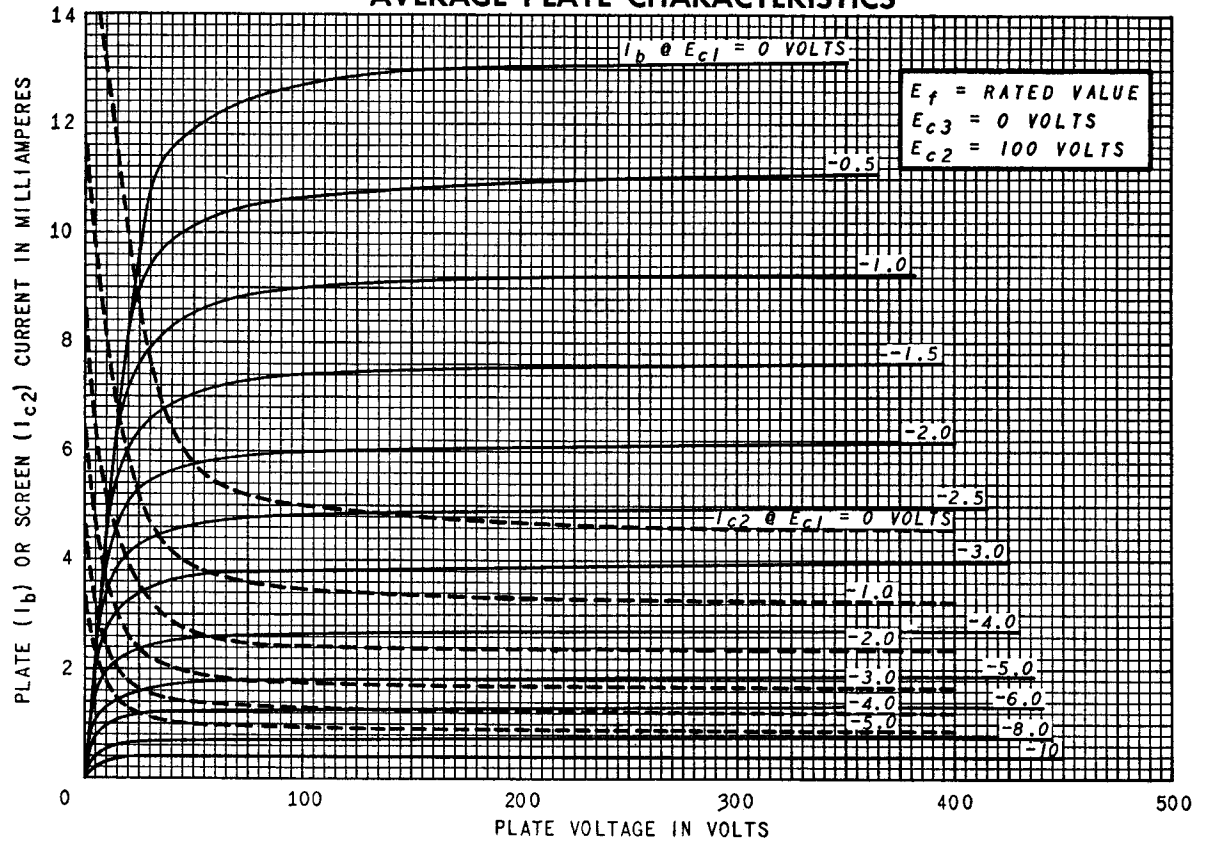
GENERAL ELECTRIC

Supersedes ET-T455A, dated 1-51

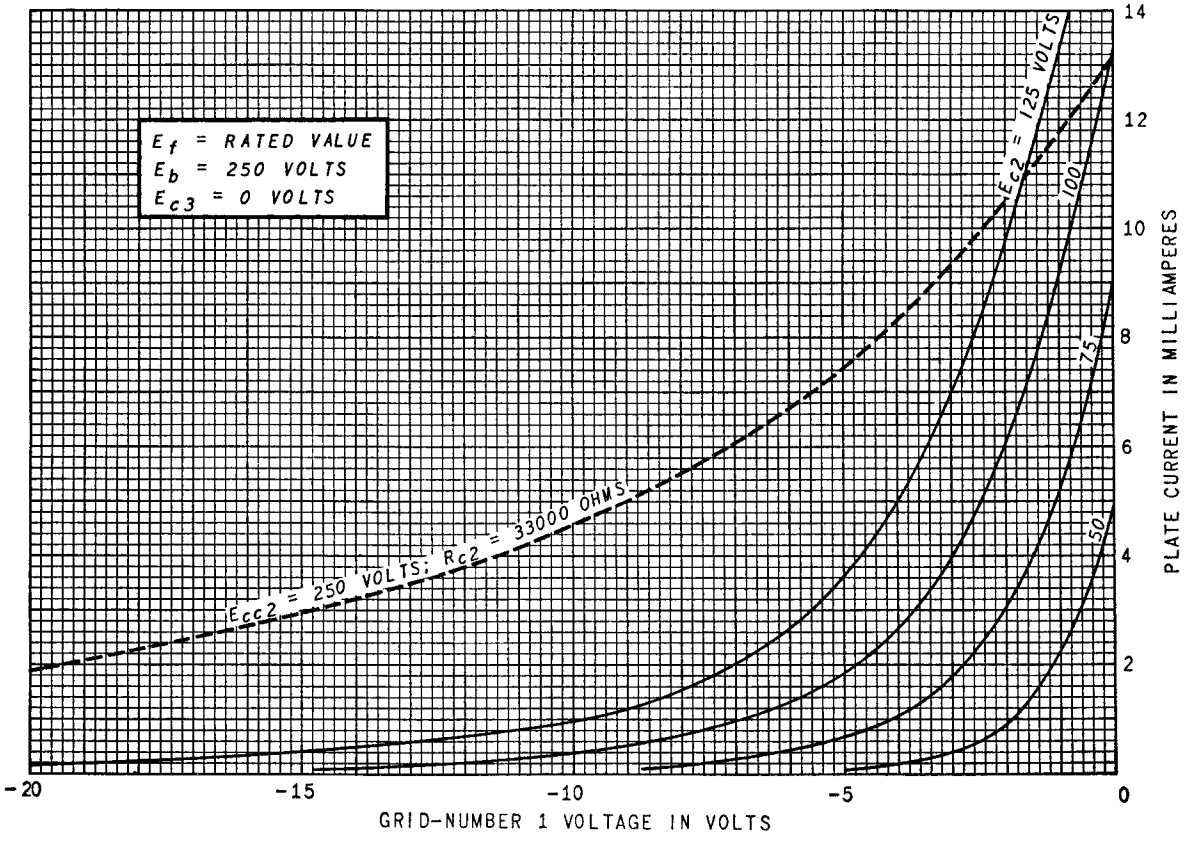
SCREEN RATING CHART



AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



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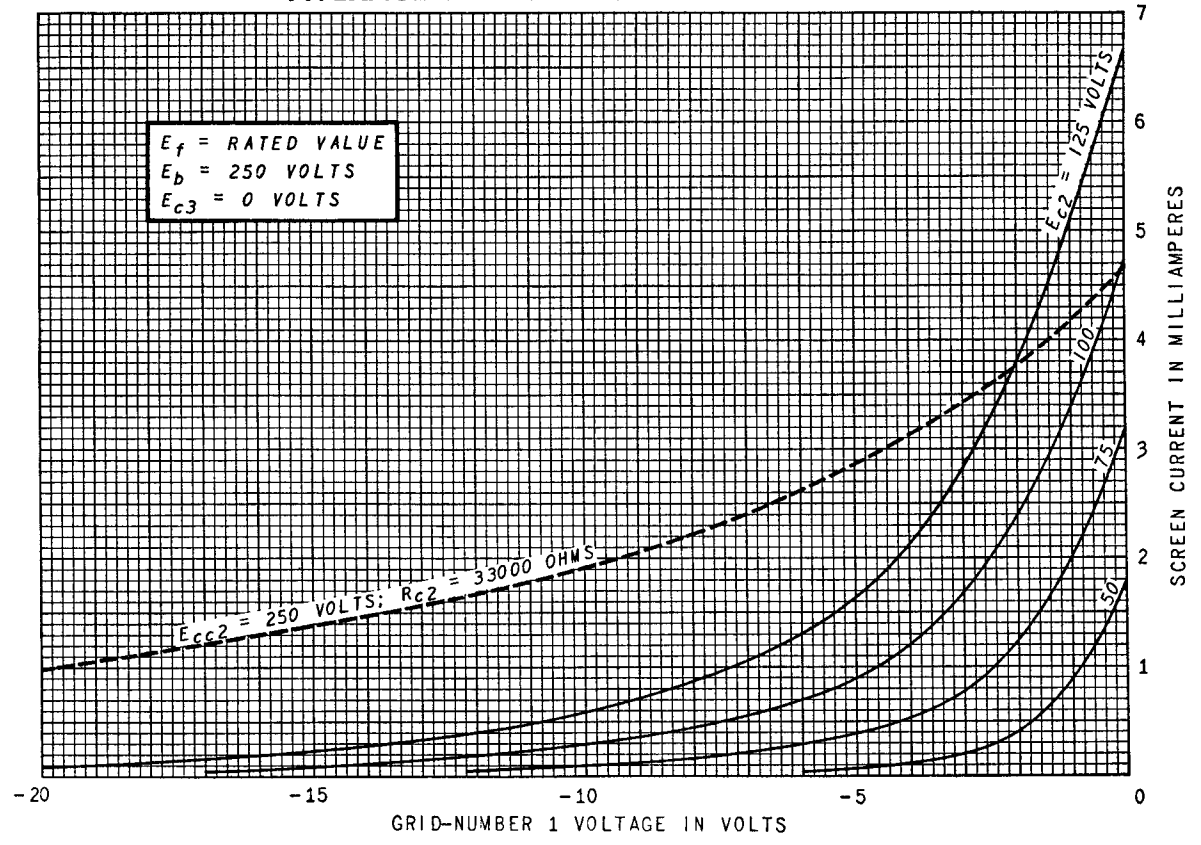

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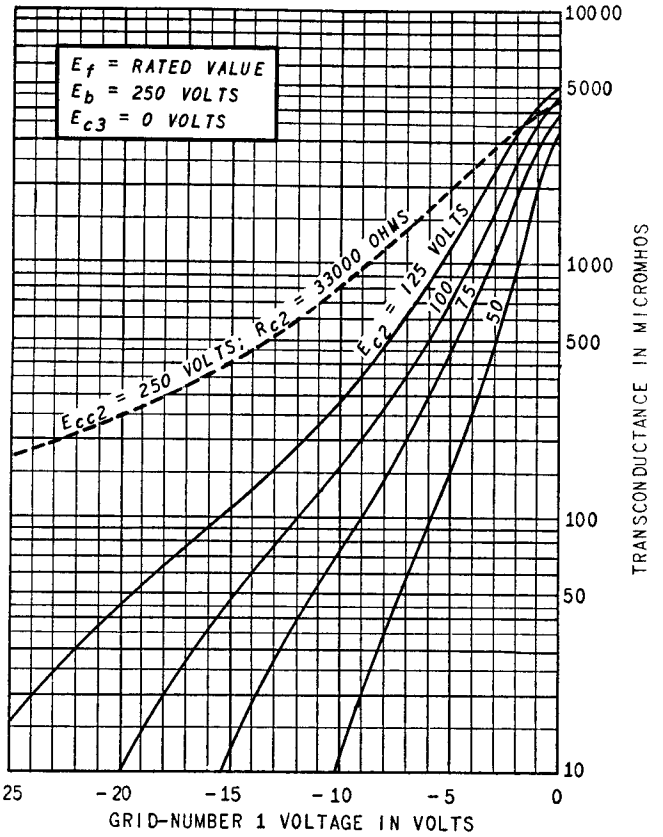

ELECTRONIC COMPONENTS DIVISION

GENERAL ELECTRIC

Schenectady 5, N. Y.