

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	$\mu\mu\text{f}$
Input	4.5	4.5	$\mu\mu\text{f}$
Output	5.5	5.5	$\mu\mu\text{f}$

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-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

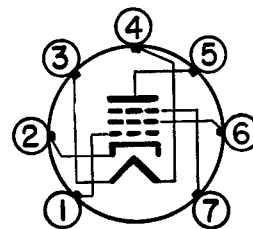
CHARACTERISTICS AND TYPICAL OPERATION

CLASS A₁ 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

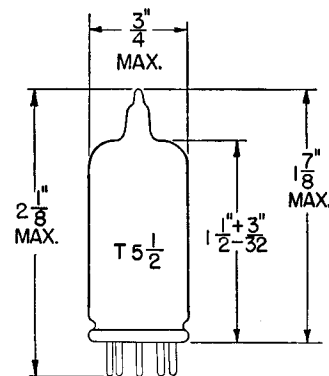


RETMA 7CM

TERMINAL CONNECTIONS

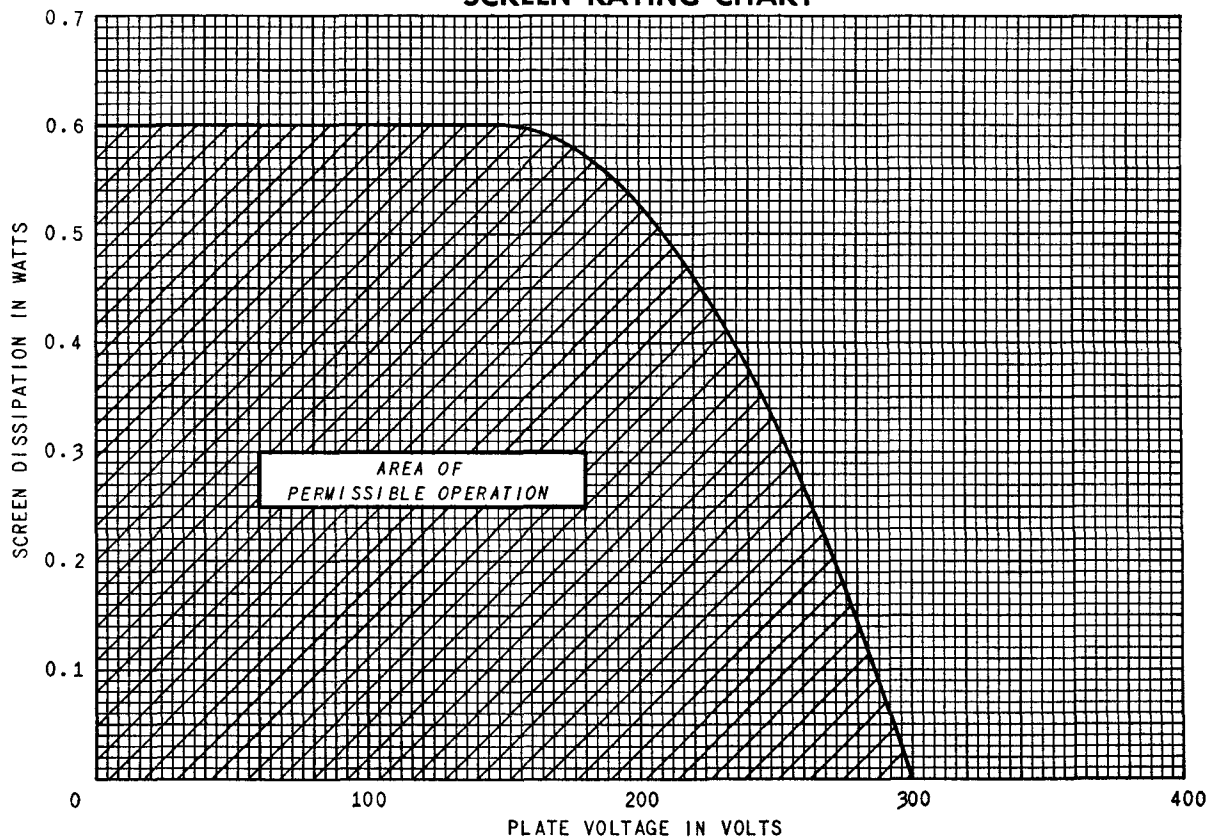
- Pin 1—Grid Number 1
- Pin 2—Cathode
- Pin 3—Heater
- Pin 4—Heater
- Pin 5—Plate
- Pin 6—Grid Number 2 (Screen)
- Pin 7—Internal Shield and Grid Number 3 (Suppressor)

PHYSICAL DIMENSIONS

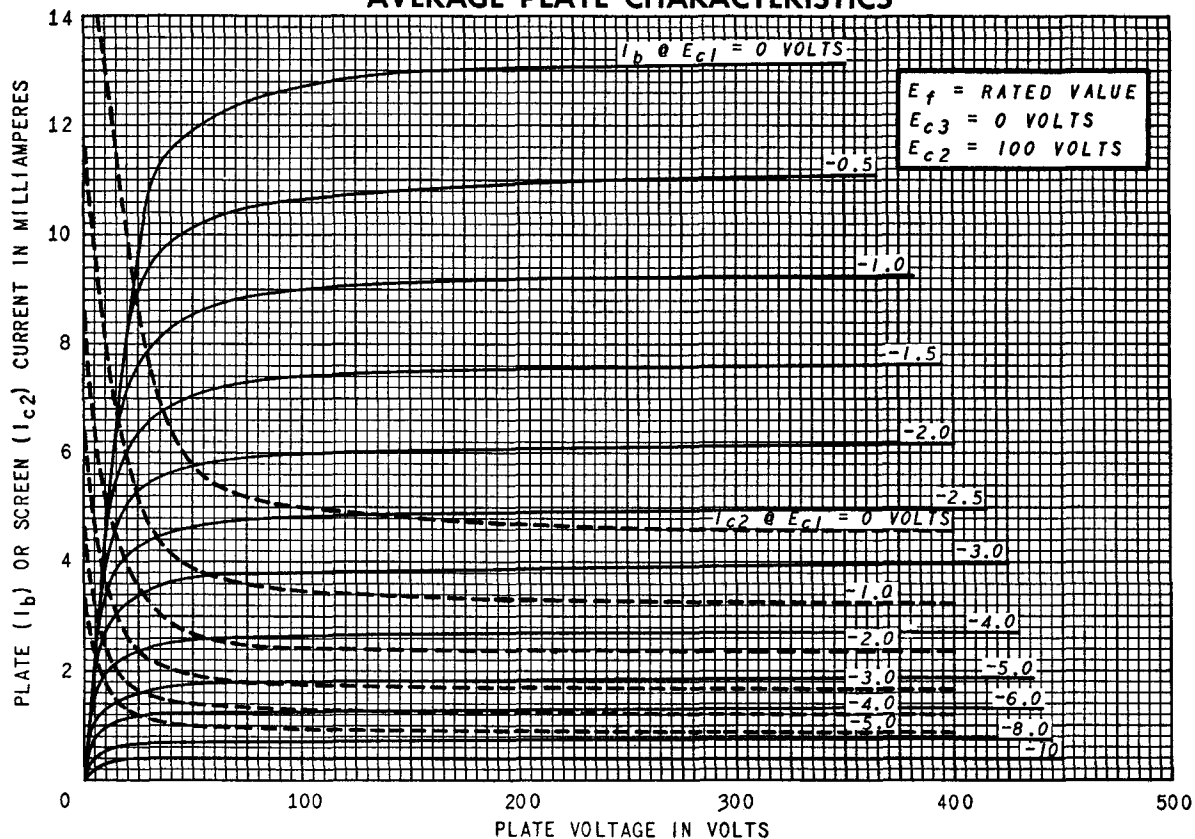


RETMA 5-2

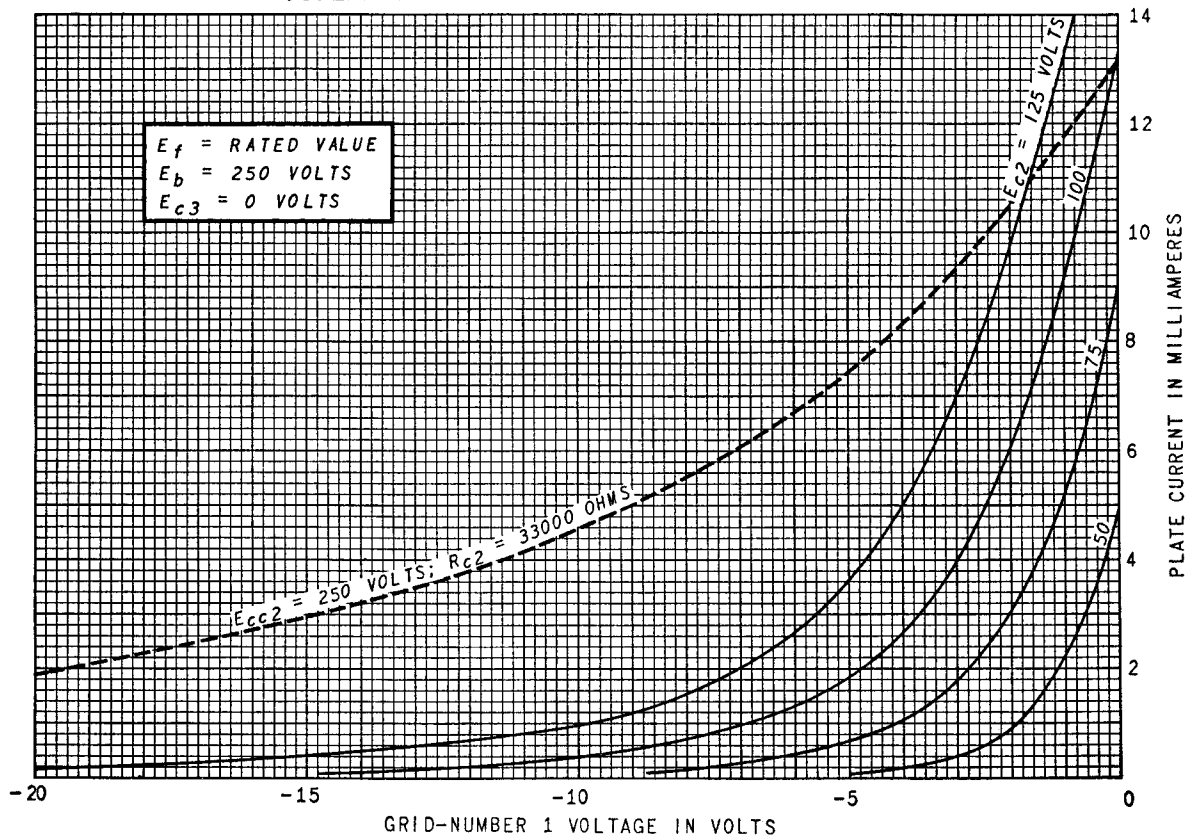
SCREEN RATING CHART



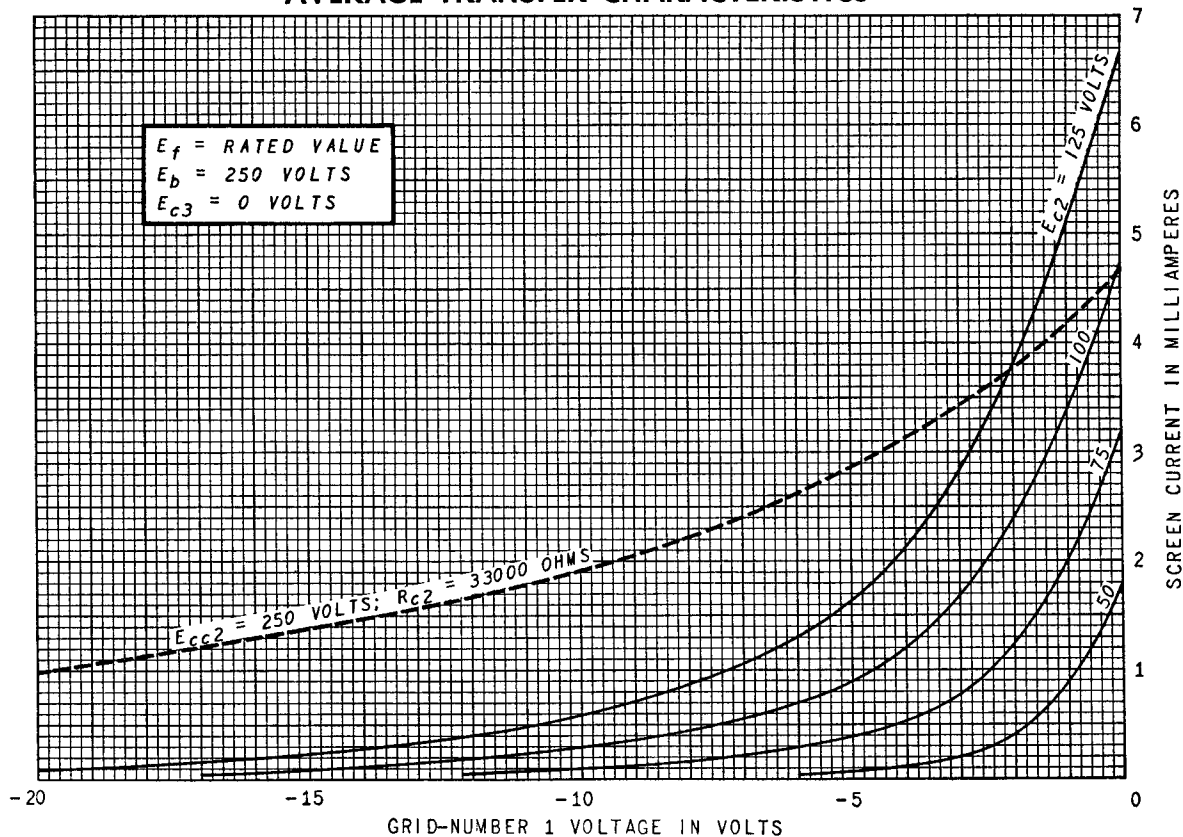
AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



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