

PENTODE

DESCRIPTION

The 5749 is a miniature remote-cut-off amplifier pentode intended for use as a radio-frequency or intermediate-frequency amplifier. This tube is de-

signed for reliable life under conditions of intermittent operation.

TECHNICAL INFORMATION

GENERAL

Electrical Data

Cathode—Indirectly Heated

Heater Voltage (A-c or D-c)	6.3	Volts
Heater Current	0.300	Ampere
Direct Interelectrode Capacitances	With Shield*	Without Shield
Grid to plate, maximum	0.0035	0.0035 uuf
Input	5.5	5.5 uuf
Output	5.5	5.0 uuf

Mechanical Data

Mounting position—any
Envelope—T-5½ glass



GENERAL  ELECTRIC

Supersedes ETX-261 dated 6-50

TECHNICAL INFORMATION (CONT'D)

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS

Maximum ratings, design center

Plate voltage.....	300	volts
Screen voltage.....	125	volts
Screen supply voltage.....	300	volts
Positive grid—No. 1 bias voltage.....	0	volts
Negative grid—No. 1 bias voltage.....	50	volts
Plate dissipation.....	3.0	watts
Screen dissipation.....	0.6	watts
Heater-cathode voltage.....	90	volts

Typical operation

Class A1 amplifier

Plate voltage.....	100	250	volts
Grid—No. 3 voltage.....	0	0	volts
Screen voltage.....	100	100	volts
Cathode bias resistor.....	68	68	ohms
Plate resistance, approximate.....	0.25	1.0	megohms
Transconductance.....	4300	4400	micromhos
Plate current.....	10.8	11.0	milliamperes
Screen current.....	4.4	4.2	milliamperes
Grid—No. 1 voltage, $G_m = 40$ umhos.....	-20	-20	volts

*With external shield No. 316 connected to pin 7.

GL-5749

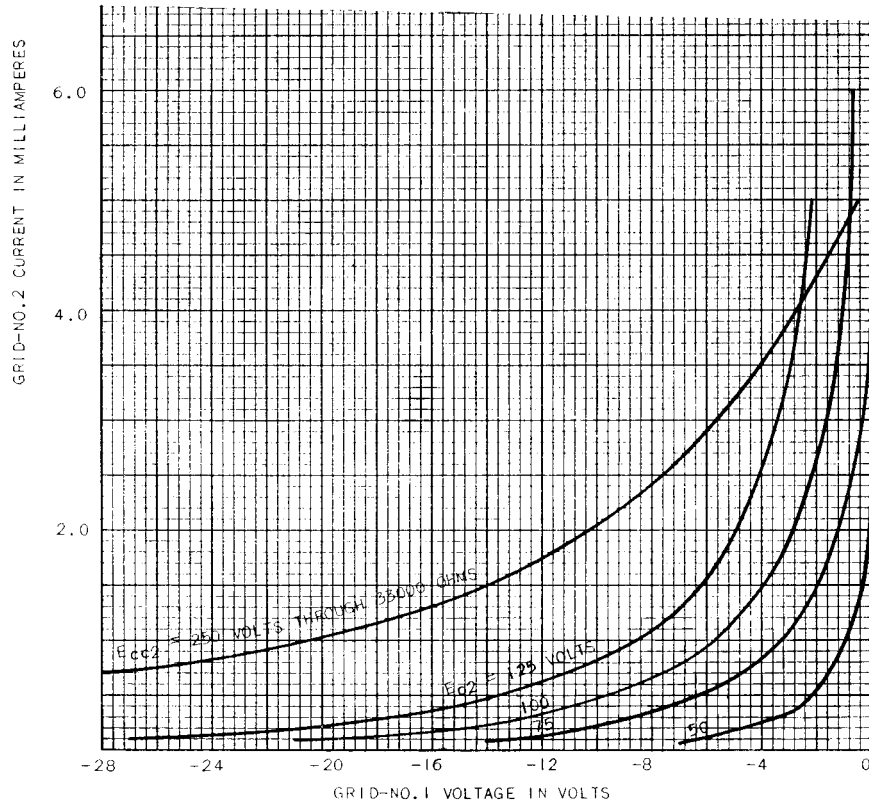
AVERAGE CHARACTERISTICS

PENTODE CONNECTION

$E_f = 6.3$ VOLTS, $E_b = 250$ VOLTS

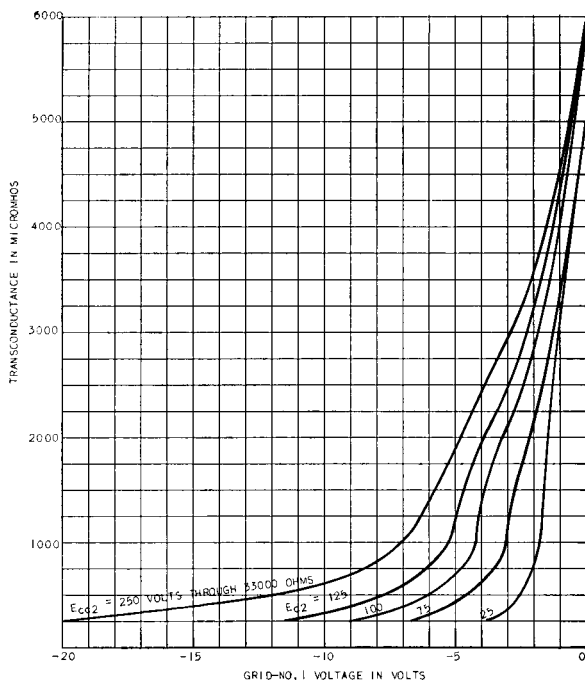
$E_{c2} =$ GRID NO. 2 VOLTAGE, $E_{c3} = 0$ VOLTS

$E_{cc2} =$ GRID NO. 2 SUPPLY VOLTAGE



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 AVERAGE CHARACTERISTICS
 PENTODE CONNECTION

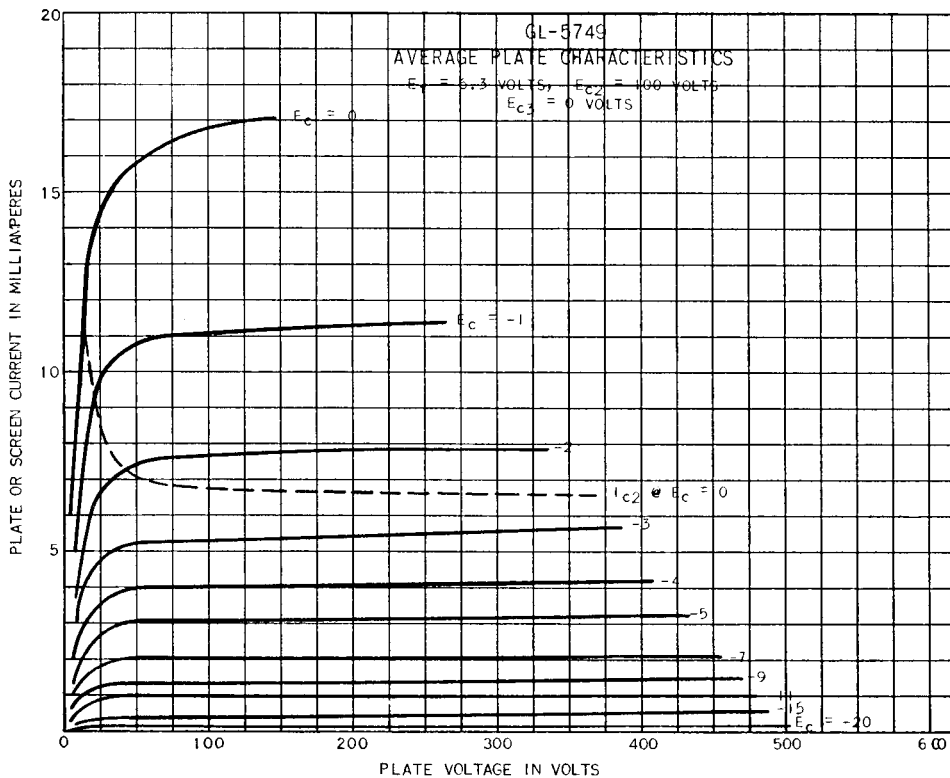
$E_f = 6.3$ VOLTS, $E_b = 250$ VOLTS
 $E_{c2} =$ GRID NO. 2 VOLTAGE, $E_{c3} = 0$ VOLTS
 $E_{c2} =$ GRID NO. 2 SUPPLY VOLTAGE



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 AVERAGE PLATE CHARACTERISTICS
 $E_f = 6.3$ VOLTS, $E_{c2} = 100$ VOLTS
 $E_{c3} = 0$ VOLTS

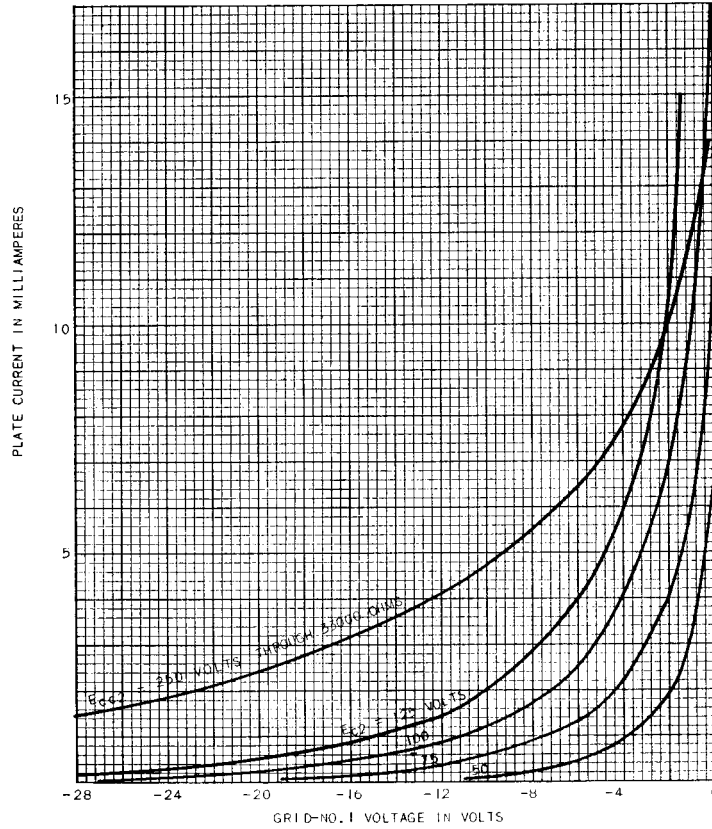


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GL-5749
 AVERAGE CHARACTERISTICS
 PENTODE CONNECTION

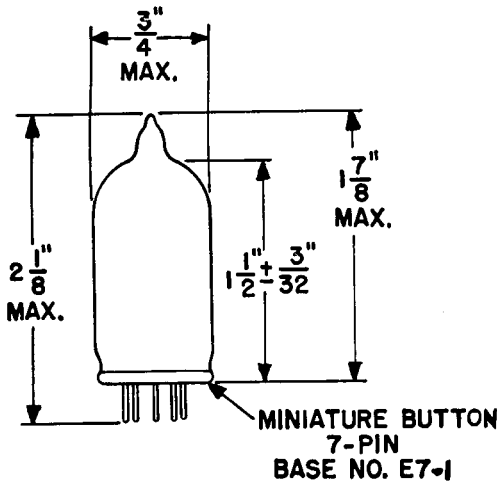
$E_f = 6.3$ VOLTS, $E_b = 250$ VOLTS
 $E_{c2} =$ GRID NO. 2 VOLTAGE, $E_{c3} = 0$ VOLTS
 $E_{cc2} =$ GRID NO. 2 SUPPLY VOLTAGE



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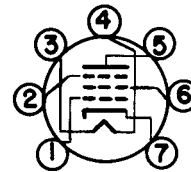
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OUTLINE
 GL-5749



N-15167A

BASING DIAGRAM



7BK

- PIN 1: GRID NO. 1
- PIN 2: GRID NO. 3 AND INTERNAL SHIELD
- PIN 3: HEATER
- PIN 4: HEATER
- PIN 5: PLATE
- PIN 6: GRID NO. 2 (SCREEN)
- PIN 7: CATHODE

1-12-50

Tube Department

GENERAL ELECTRIC

Schenectady, N. Y.