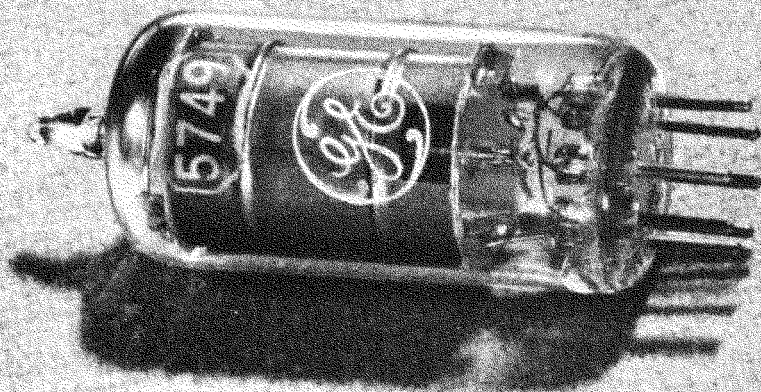




PENTODE

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)
Heater Current
Direct Interelectrode Capacitances
Grid to plate, maximum
Input
Output

.....6.3 Volts
.....0.300 Ampere
Without Shield
.....0.0035 uuf
.....5.5 uuf
.....5.0 uuf

With Shield*

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

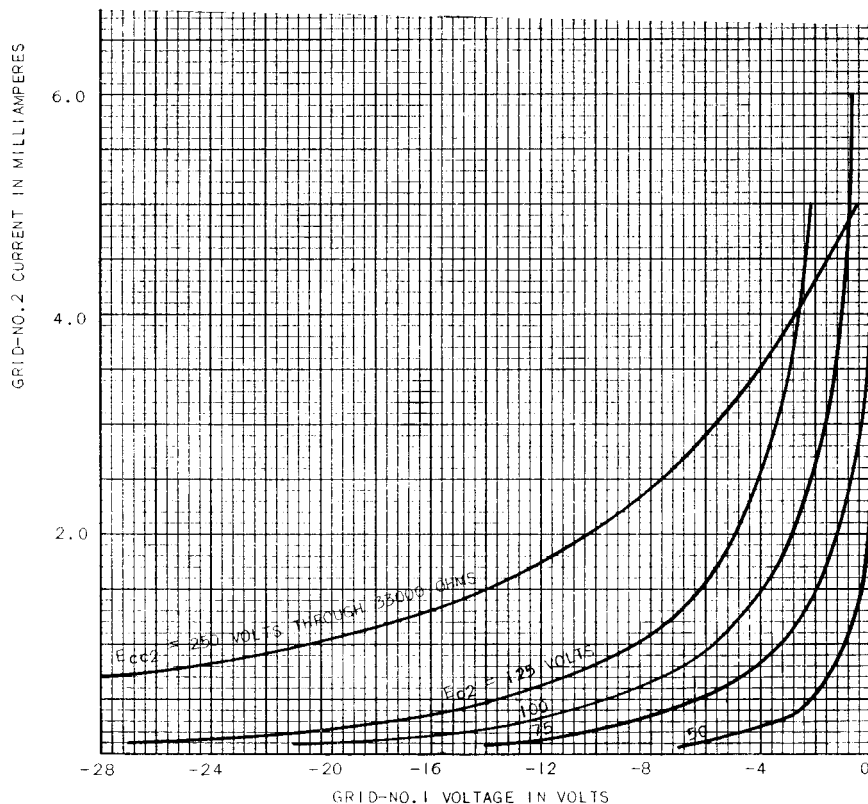
AVERAGE CHARACTERISTICS

PENTODE CONNECTION

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

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

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



GL-5749
AVERAGE CHARACTERISTICS
PENTODE CONNECTION

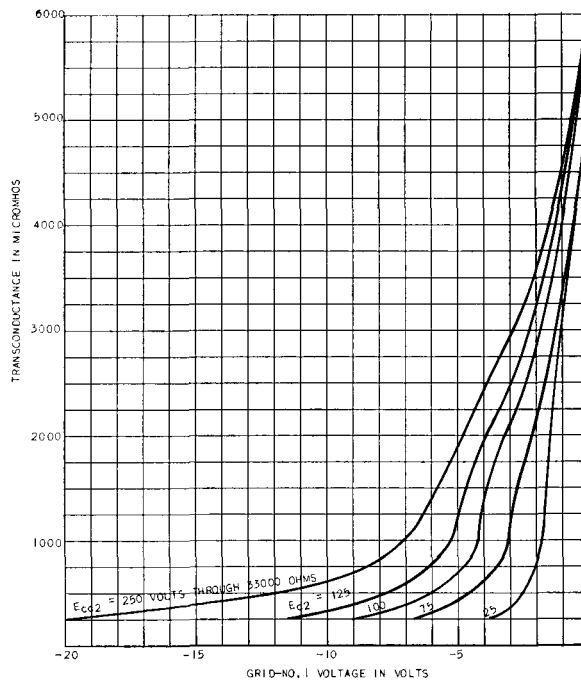
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GL-5749

ETX-261A

PAGE 3

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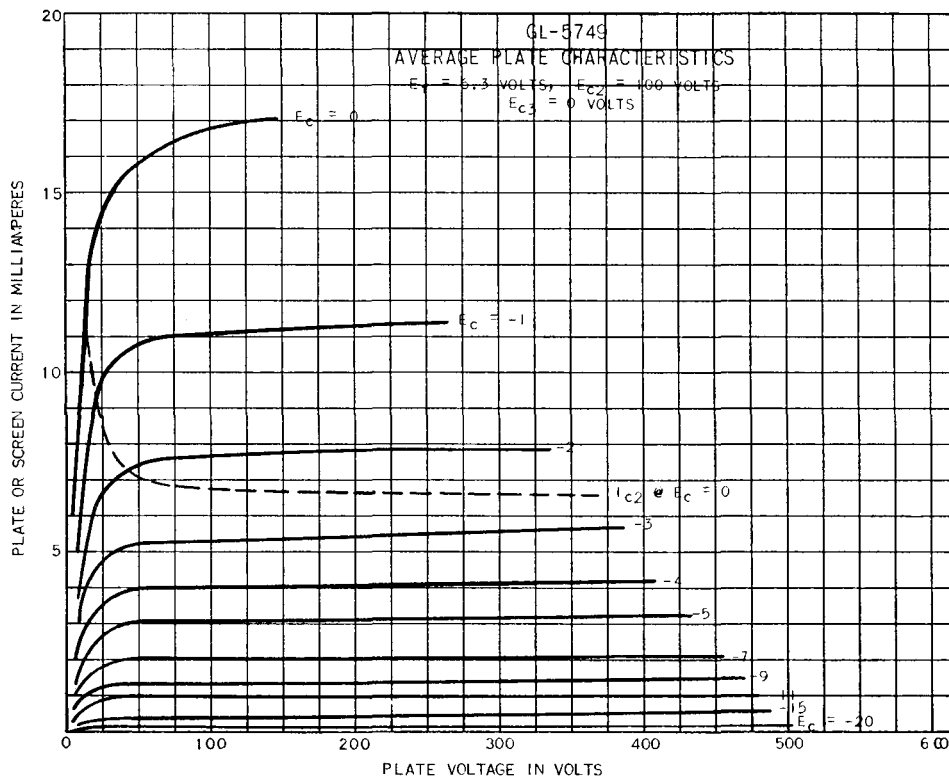
$E_f = 6.3$ VOLTS, $E_b = 250$ VOLTS
 $E_{c2} = \text{GRID NO. 2 VOLTAGE}$, $E_{c3} = 0$ VOLTS
 $E_{cc2} = \text{GRID NO. 2 SUPPLY VOLTAGE}$



K-69087-72A346

2-7-50

GL-5749
AVERAGE PLATE CHARACTERISTICS
 $E_f = 6.3$ VOLTS, $E_{c2} = 100$ VOLTS
 $E_{c3} = 0$ VOLTS



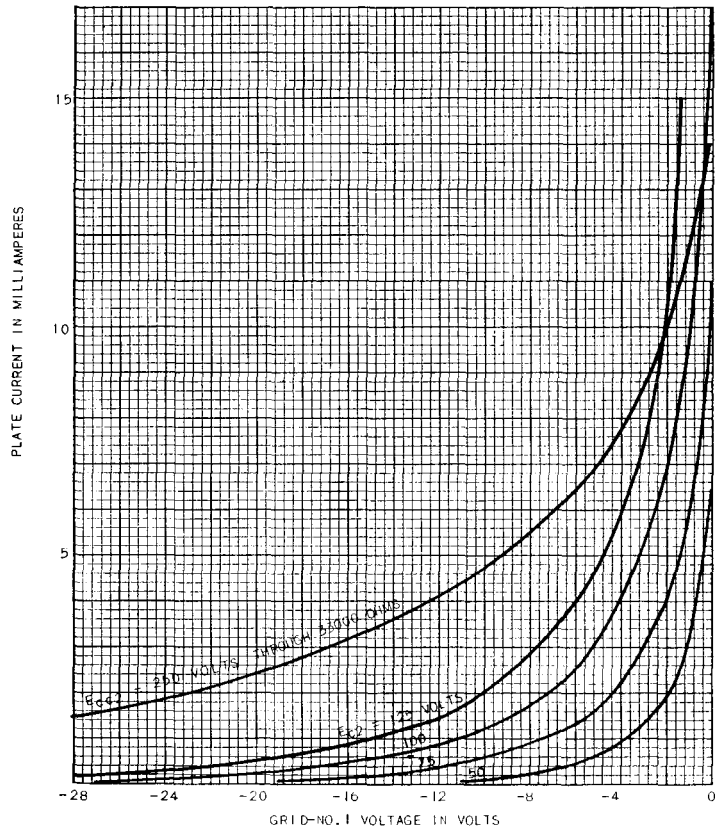
K-69087-72A343

1-19-50

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

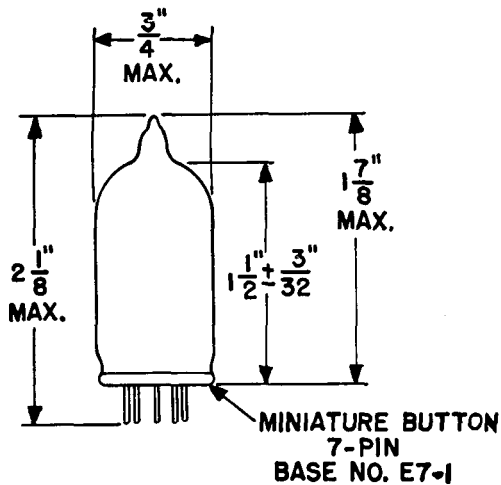
$E_{c2} = \text{GRID NO. 2 VOLTAGE}$, $E_{c3} = 0$ VOLTS

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



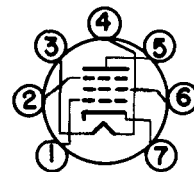
OUTLINE

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

Tube Department

GENERAL ELECTRIC

Schenectady, N. Y.

1-12-50