26.5 Volts

# **DESCRIPTION AND RATING**

### **PLIOTRON GL-5798**

The GL-5798 is a subminiature medium-mu twin triode suitable for use as an oscillator-mixer at frequencies up to approximately 400 megacycles. The tube is designed to give reliable service and dependable life under conditions of shock, vibration, and high ambient temperature as encountered in aircraft service. The heater-cathode construction is designed to withstand many-thousand cycles of intermittent operation. The GL-5798 is especially suited for applications in which the supply voltage for the heater and plates is approximately 26.5 volts.

#### TECHNICAL INFORMATION

#### GENERAL

Electrical Data

Heater Voltage

Cathode - Coated Unipotential

Heater Current	0.090	Ampere
Direct Interelectrode Capacitances*		
Grid to Plate (Each Section)	1.7	uuſ
Input (Each Section)	1.9	uu f
Output (Each Section)	1.7	uuf

Mechanical Data

Mounting Position - Any Envelope - T-3 Glass

Base - Subminiature Button 8-Lead, K8-1\*\*

### MAXIMUM RATINGS

Electrical - Design Center Values

Plate Voltage Plate Dissipation (Each Section) Heater-Cathode Voltage	50 0.4 90	Volts Watt Volts
Mechanical		
Peak Impact Acceleration in Any Direction	300	G
Vibrational Acceleration in Any Direction	2.5	G

Peak Impact Acceleration in Any Direction	200	U	
Vibrational Acceleration in Any Direction ≠	2.5	G	
Ambient Temperature	+175	C	

# CHARACTERISTICS AND TYPICAL OPERATION

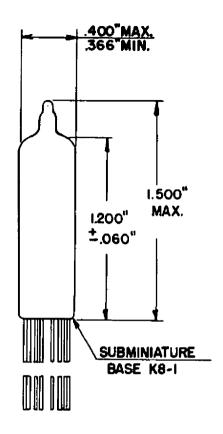
Class  $A_1$  Amplifier - Each Section

Plate Voltage	26.5	Volts
Grid Voltage	0	Volt
Amplification Factor	21	
Plate Resistance, approximate	6700	Ohms
Transconductance	3150	Micromhos
Plate Current	2.3	Milliamperes
Grid Voltage, approximate for Ib = 10 Microamperes	-2.5	Volts

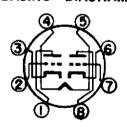
- \* With minimum lead length of 1.500 inches as specified.
- \*\* With external shield of 0.405 inch diameter connected to cathode of section under test.
- / For a period of at least 96 hours at 25 cycles per second.

from RTMA release #1020, Sept. 17, 1951, & release #1020A, Dec. 12, 1952





## BASING DIAGRAM



BOZ (BOTTOM VIEW)

LEAD 1: PLATE (SECTION 2)
LEAD 2: GRID (SECTION 2)

LEAD 3: CATHODE (SECTION 2)
LEAD 4: POSITIVE HEATER

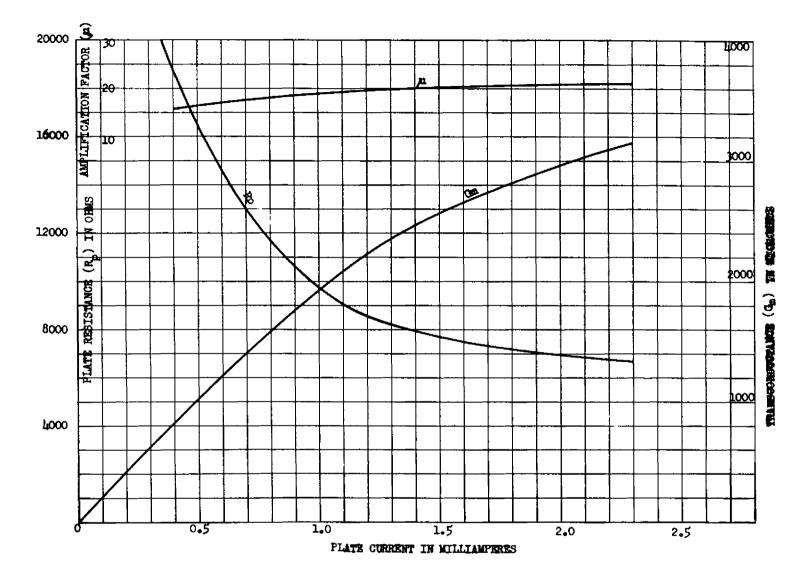
LEAD 5: NEGATIVE HEATER AND INTERNAL SHIELD

LEAD 6: CATHODE (SECTION I)
LEAD 7: GRID (SECTION I)
LEAD 8: PLATE (SECTION I)

K69087-72A477

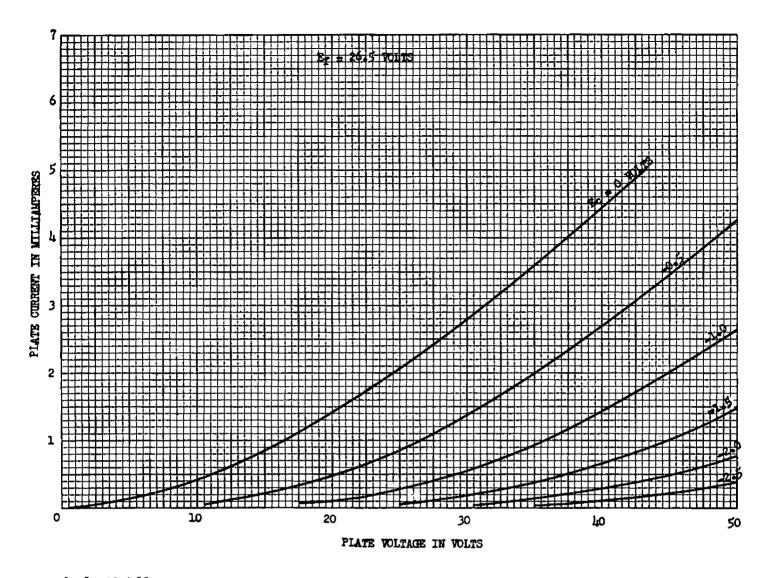
July 23, 1951

OUTLINE GL-5798



K-69087-72A470 July 23, 1951

GL-5798
AVERAGE CHARACTERISTICS
(EACH SECTION)
Ef = 26.5 Volts Eb = 26.5 Volts



K-69087-72A466 July 19, 1951

GL-5798 AVERAGE PLATE CHARACTERISTICS (EACH SECTION)



8-51 (1M)

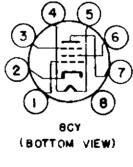
SCHENECTADY, NEW YORK

### Correction Notice for 5797 and 5798 Data Sheets

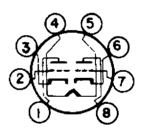
Direct Interelectrode Capacitances should be referenced with a double asterisk instead of a single one.

Base-Subminiature Button 8-Lead, K8-1 should be referenced with a single asterisk instead of a double one.

The Basing Diagram should show an eighty-degree spacing between leads one and eight and a forty-degree spacing between all other leads. The proper delineation of this diagram appears below.



5797



8GZ (BOTTOM VIEW)

5798

## RADIO - TELEVISION MANUFACTURERS ASSOCIAT

### ENGINEERING DEPARTMENT



Release No. 1020 A

(Tent.) New York: 7. N. Y.

December 12, 1952

To Tube Engineers:

On September 17, 1951, in Release No. 1020, the RTMA Engineering Office announced registration of the tube type designations

5797 5798

under sponsorship of General Electric Company, Schenectady 5, New York.

Sponsor now proposes the following modifications in designation 5797:

Item	As Registered	As Proposed
Direct Interelectrode Capacitances		
Grid No.1 to Plate, maximum,	0.028	0.024 uuf
Input	4.0	4.2 uuf
Output	4.2	3.2 uuf
Heater Voltage	26.5	26.5/5% Volte
Base - Subminiature Button 8-Lead	k8-1	E8-10
MAXIMUM RATINGS		
Mechanical		
Peak Impact Acceleration	300	450 G
Ambient Temperature	<b>√</b> 175	omit Centigrade
Bulb Temperature at Hottest Point CHARACTERISTICS AND TYPICAL OPERATION	not given	#225 Centigrade
Plate Current	2.75	2.8 Milliamreres

And the following modifications to designation 5798:

Heater Voltage	26.5	26.5/5% Volts
Base-Subminiature Button 8-Lead MAXIMUM RATINGS	K8-1	E8-10
Electrical		
Plate Dissipation (Each Section)	0.4	0.2 Watt
Mechanical		
Peal Impact Acceleration	300	450 G
Ambient Temperature	<b>∤</b> 175	omit Centigrade
Bulb Temperature at Hottest Point	not given	f225 Centigrade
CHARACTERISTICS AND TYPICAL OPERATION	-	• •
Amplification Factor	21	24
Plate Resistance, approximate	6700	7100 Ohma
Transconductance	3150	3400 Micromhus
Plate Current	2.3	2.0 Milliamnes

Unless valid objection to these reregistrations are lodged with the Engineering Office prior to January 12, 1953, these registrations will be made and this material will be reissued marked "Final".

Very truly yours,

Chief Engineer

Radio-Television Manufacturers Association

RRBa tcher:mg