

DESCRIPTION AND RATING

PLIOTRON GL-5798

The GL-5798 is a subminiature medium- μ 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

Cathode - Coated Unipotential

Heater Voltage	26.5	Volts
Heater Current	0.090	Ampere

Direct Interelectrode Capacitances*

Grid to Plate (Each Section)	1.7	uuf
Input (Each Section)	1.9	uuf
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	50	Volts
Plate Dissipation (Each Section)	0.4	Watt
Heater-Cathode Voltage	90	Volts

Mechanical

Peak Impact Acceleration in Any Direction	300	G
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 $I_b = 10$ Microamperes	-2.5	Volts

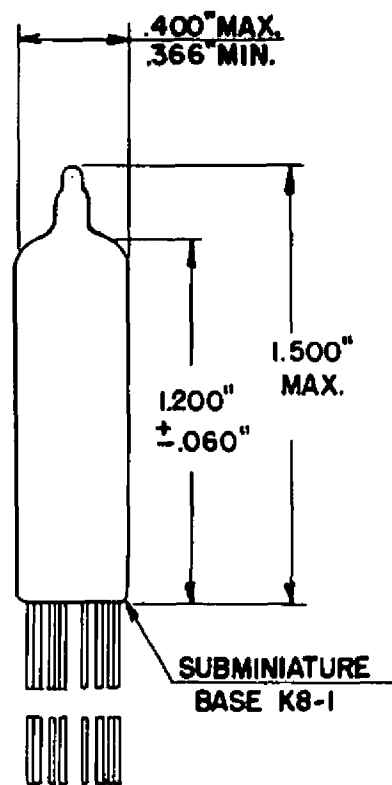
* With minimum lead length of 1.500 inches as specified.

** With external shield of 0.405 inch diameter connected to cathode of section under test.

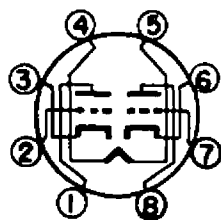
∇ For a period of at least 96 hours at 25 cycles per second.

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

GENERAL  ELECTRIC



BASING DIAGRAM



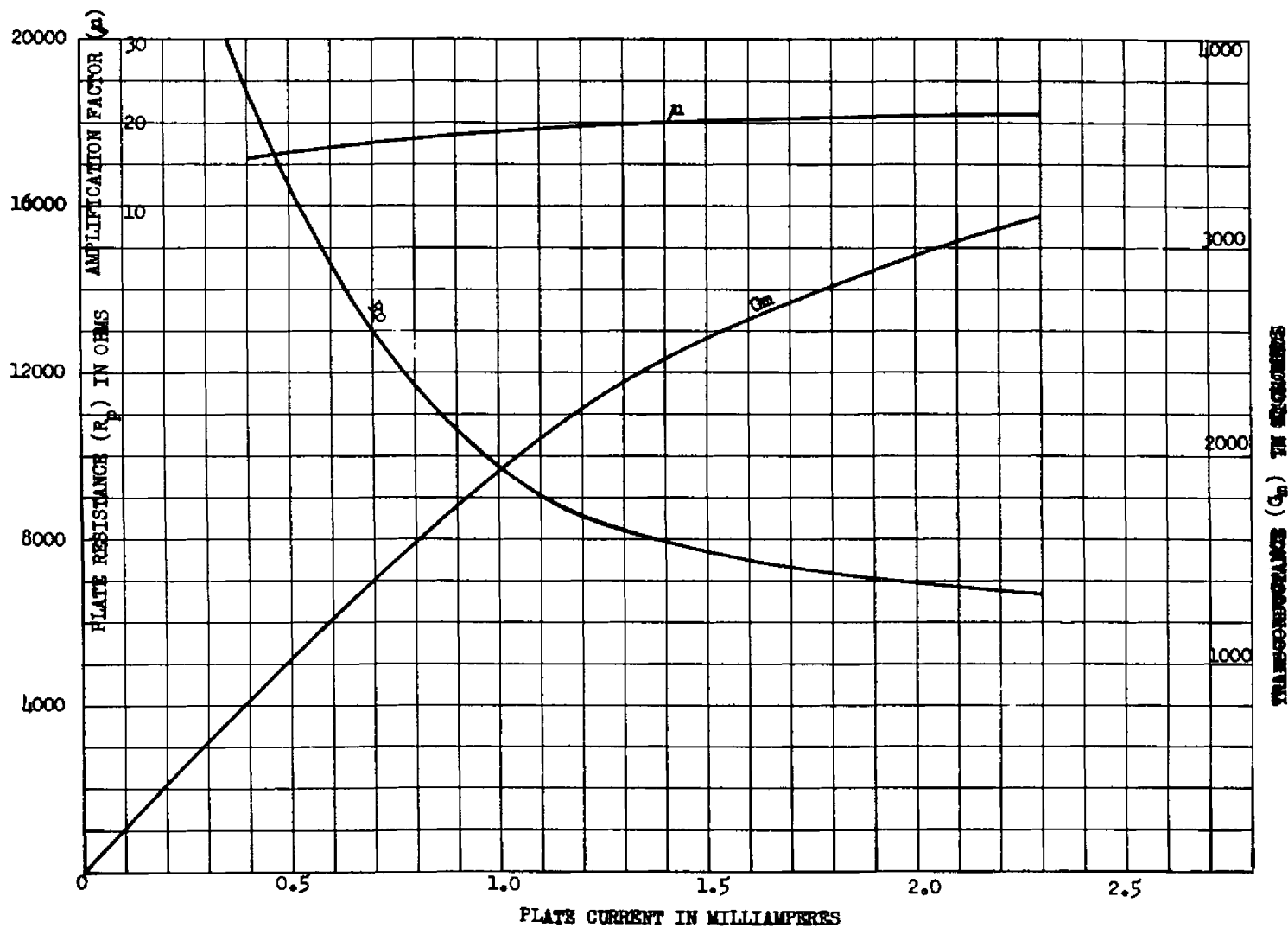
**8CZ
(BOTTOM VIEW)**

- 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 1)**
- LEAD 7: GRID (SECTION 1)**
- LEAD 8: PLATE (SECTION 1)**

K69087-72A477

July 23, 1951

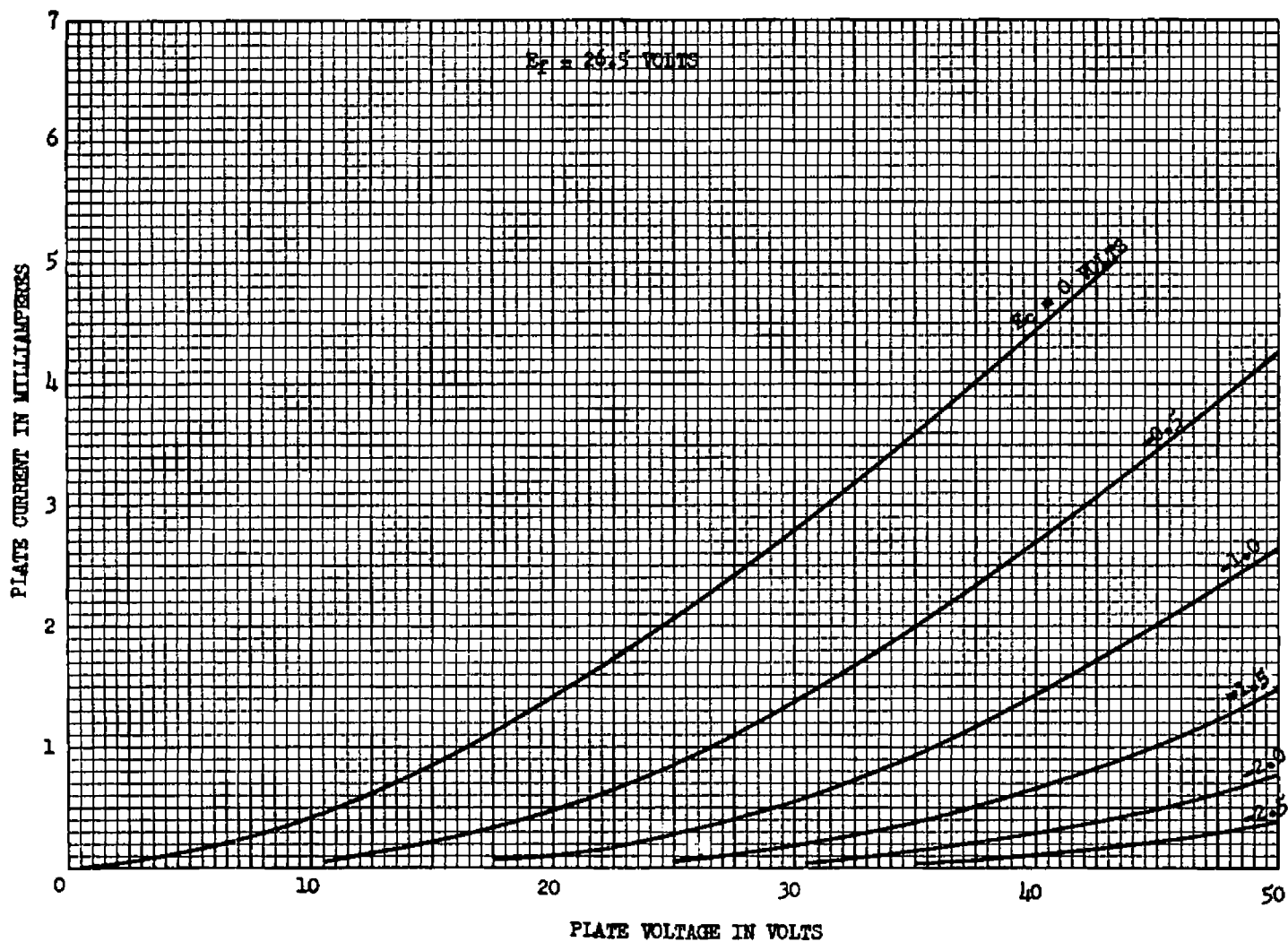
OUTLINE
GL-5798



K-69087-72A470

July 23, 1951

GL-5798
 AVERAGE CHARACTERISTICS
 (EACH SECTION)
 $E_f = 26.5$ Volts $E_b = 26.5$ Volts



K-69087-72A466

July 19, 1951

GL-5798
AVERAGE PLATE CHARACTERISTICS
(EACH SECTION)

GENERAL  ELECTRIC

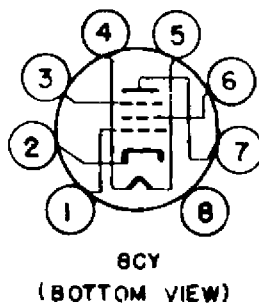
ELECTRONICS DEPARTMENT, TUBE DIVISIONS
SCHENECTADY, NEW YORK

Correction Notice for 5797 and 5798 Data Sheets

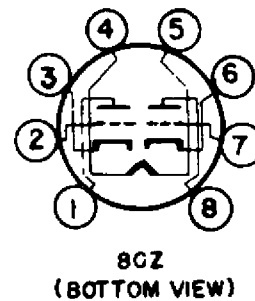
Direct Interelectrode Capacitances should be referenced with a double asterisk instead of a single one.

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.



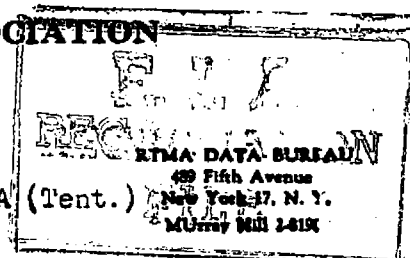
5797



5798

RADIO - TELEVISION MANUFACTURERS ASSOCIATION

ENGINEERING DEPARTMENT



Release No. 1020 A (Tent.)

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:

<u>Item</u>	<u>As Registered</u>	<u>As Proposed</u>
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% Volts
Base - Subminiature Button 8-Lead	K8-1	E8-10
MAXIMUM RATINGS		
Mechanical		
Peak Impact Acceleration	300	450 G
Ambient Temperature	175	omit Centigrade
Bulb Temperature at Hottest Point	not given	225 Centigrade
CHARACTERISTICS AND TYPICAL OPERATION		
Plate Current	2.75	2.8 Milliamperes

And the following modifications to designation 5798:

Heater Voltage	26.5	26.5/5% Volts
Base-Subminiature Button 8-Lead	K8-1	E8-10
MAXIMUM RATINGS		
Electrical		
Plate Dissipation (Each Section)	0.4	0.2 Watt
Mechanical		
Peak Impact Acceleration	300	450 G
Ambient Temperature	175	omit Centigrade
Bulb Temperature at Hottest Point	not given	225 Centigrade
CHARACTERISTICS AND TYPICAL OPERATION		
Amplification Factor	21	24
Plate Resistance, approximate	6700	7100 Ohms
Transconductance	3150	3400 Micromhos
Plate Current	2.3	2.0 Milliamperes

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